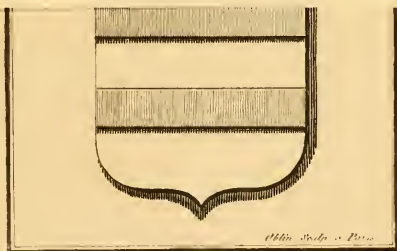




YALE



MEDICAL LIBRARY

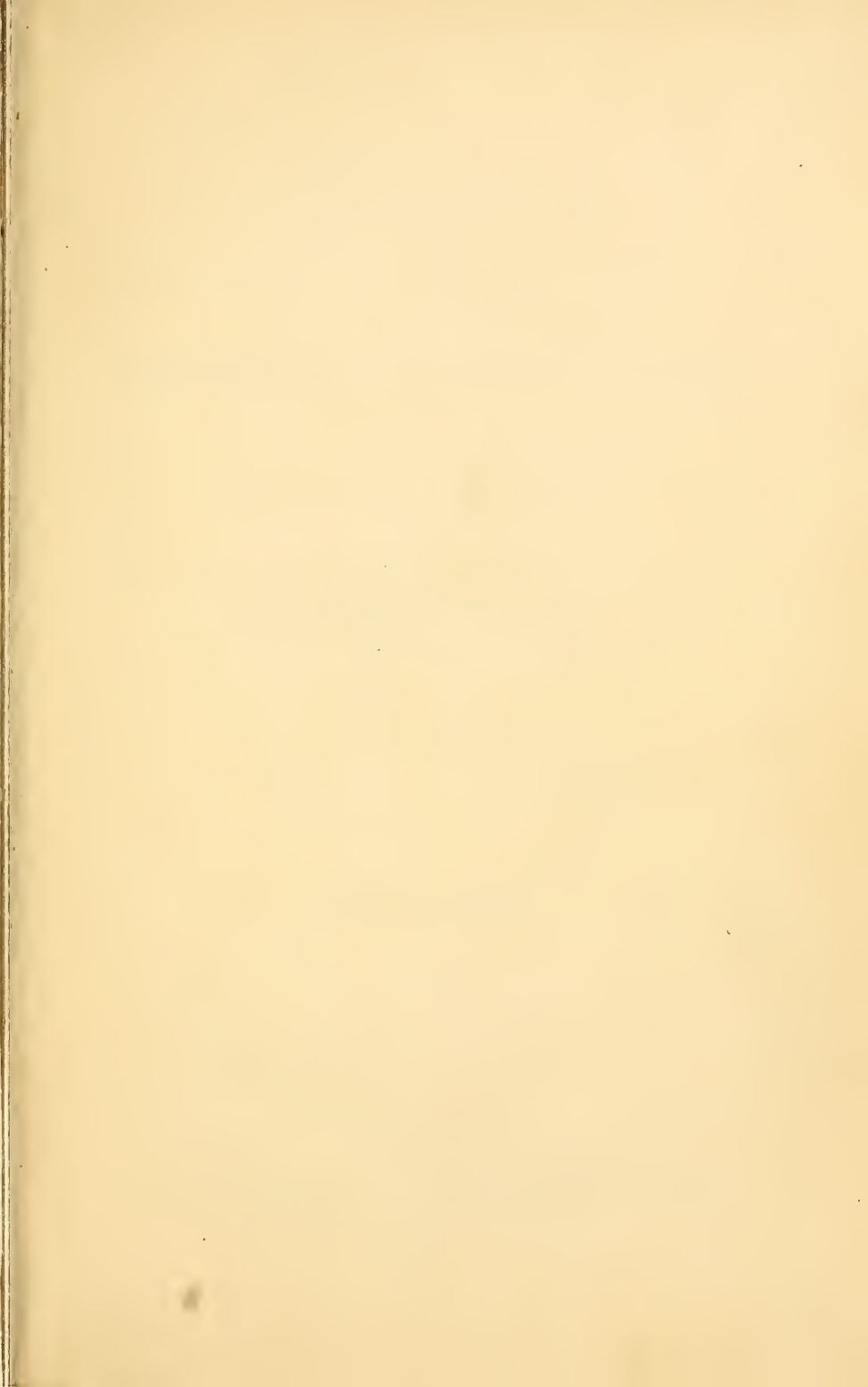


J. F. C. Mainwaring.

God



72



CURIOSITIES
OF
MEDICAL EXPERIENCE.

By J. G. MILLINGEN, M.D.

SURGEON TO THE FORCES :
MEMBER OF THE MEDICAL SOCIETY OF THE ANCIENT FACULTY OF PARIS ;
OF THE MEDICAL SOCIETY OF BORDEAUX ;
AND AUTHOR OF "THE MEDICAL OFFICER'S MANUAL," &c.

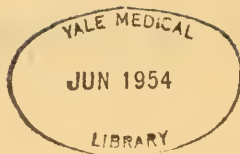
Homo sum : humani nihil à me alienum puto.—TERENCE.

IN TWO VOLUMES.

VOL. I.

LONDON :
RICHARD BENTLEY, NEW BURLINGTON STREET,
Publisher in Ordinary to His Majesty.

1837.



R706
837M

1

TO
SIR ASTLEY COOPER, BART.


&c. &c. &c.

THESE VOLUMES

ARE INSCRIBED,

AS A FEEBLE TRIBUTE OF RESPECT AND ESTEEM, BY

THE AUTHOR.



Digitized by the Internet Archive
in 2011 with funding from
Open Knowledge Commons and Yale University, Cushing/Whitney Medical Library

INTRODUCTION.

THE great success and correspondent utility of D'Israeli's "Curiosities of Literature," have induced me to add to the ample harvest of that ingenious writer a few gleanings from another field. They may not afford the same amusing variety to the general reader, but they may tend to draw some attention to many important points that affect the chequered lot of mankind. The progress that every science has rapidly made during the last half century has been astounding, and seems to have kept pace with those struggles of the intellectual faculties to burst from the shackles of prejudice and error that had ignobly bound them for so many ages. Groping in darkness, man sought the light, but unfortunately the sudden refulgence at times dazzled instead of guiding his steps in the pursuit of truth, and led him into errors as perilous as those that had surrounded him in his former mental obscurity. His gigantic powers were aroused, but, too frequently misapplied, they shook the social

edifice to its very foundation. The daring hand of innovation destroyed without contemplating what better fabric could be raised on the ruin : and while the nobler faculties with which Providence had gifted us were exerted for the public weal, the baser parts of our passions sought liberty in licentiousness. Ambition degenerated into ferocity, scepticism led to impiety, and even apparent virtue sought to propagate the doctrines of good, by assuming the “goodly outside” of vice. Religion was overthrown because priestcraft had deceived, and high rank was held up to detestation because princes and nobles had been corrupt ; and to use Shakspeare’s words,

Thus we debase
The nature of our seats, and make the rabble
Call our cares, fears ; which will in time break ope
The lock o’ the senate, and bring in the crows
To peck the eagles.

In ten short years this mighty revolution in the intellect of man took place,—in a country too that may be considered the cradle of the future weal and woe, perhaps of the universe ;—in ten short years we beheld Montesquieu, Raynal, Rousseau, Voltaire, Condillac, Helvetius, beaming like rising meteors in the dark firmament, and shedding a fearful gleam on the past, the present, and the future !*

* During these ten years the following works appeared :—
Montesquieu—*Esprit des Lois*, 1748.

————— *Défense de l’Esprit des Lois*, 1750.

No longer trusting in blind confidence to the scholastic rules of those dignitaries of science whose conclusions were considered sufficient to command our faith, man became sceptical and positive; doubt and disbelief were carried into every investigation; the reign of *prestiges* was over; the former monopolists of power and of science, the two great levers of society, (the more effective since their fulcra rested on timidity and ignorance,) were thrown from their antiquated stand, and found themselves brought face to face in explanatory contact with their once all-believing and obedient pupils, but now become a neoterick generation;—the crown and the sceptre, the cap and the gown, were baubles in their eyes. When the faculty of reasoning was not able to prevail, the shafts of ridicule were drawn from the quiver of philosophic wit, and inflicted rankling wounds where they could not destroy. Ancient systems were exploded with ancient prejudices, theories were overthrown with dynasties, and doctrines with governments;—one might have imagined that the formidable power of

Rousseau—Discours sur l'Influence des Sciences et des Lettres, 1750.

——— Discours sur l'Inégalité des Conditions, 1754.

Voltaire—Essai sur les Mœurs et l'Esprit des Nations, 1757.

Condillac—Essai sur l'Origine des Connaissances Humaines, 1746.

——— Traité des Sensations, 1754.

Helvétius—De l'Esprit, 1758.

steam had been communicated to the mind, illustrating the words of Milton,

The mind is its own place, and in itself
Can make a heaven of hell, and hell of heaven.

Science, now aimed at generalisation — the physiologist, the chemist, became legislators, stepping from the academic chair to the senatorial seat, and from teaching how to benefit mankind, they hurried to destroy, forgetful, in their ambitious dream, of the noble encomium of Cicero, “*Homines ad deos nullâ se proprius accedunt, quam salutem hominibus dando.*”

Philosophy and the study of medicine were now inseparable; this noble science was not to be attained in books only, but in the study of mankind. Rousseau thus spoke of physicians when writing to Bernardin de Saint Pierre:—“*Il n’y a pas d’état qui exige plus d’étude que le leur; par tous les pays, ce sont des hommes les plus véritablement savans et utiles.*” Voltaire was of a similar opinion when he thus expressed himself: “*Il n’est rien de plus estimable au monde, qu’un médecin qui, ayant dans sa jeunesse étudié la nature, connu les ressorts du corps humain, les maux qui le tourmentent, les remèdes qui peuvent le soulager, exerce son état en s’en défiant, et soigne également les pauvres et les riches.*”

How came it then that these great observers did not partake of the prejudices of Montaigne,

Molière, and other writers, who invariably stigmatised the practice of physic? simply because it was no longer a dogmatic profession exercised with scholastic pedantry, but a science founded on the study of nature, and the immutable laws of sound philosophy. Although a classic education forms an indispensable part of a physician's education, yet it is in more important pursuits that his experience should be obtained: the knowledge of ancient languages is principally useful in discovering the errors of the olden writers, and detecting the bare-faced plagiarisms of the moderns.

Much valuable time, however, may be lost in the pursuit of ancient lore; and Montaigne has justly observed, "There are books which should only be read, but others that must be learnt." This discrimination is of the utmost importance; for it may be said of the book-worm's library, "*Multitudo librorum sæpe est nubes testium ignorantiae possessoris.*" Aristippus very properly replied to a man who boasted of his reading, "It is not those who eat the most that are hale and healthy, but those who can best digest." Hence the distinction that arose between the philosophical physician and the dogmatiser. The one was guided by the observation of facts, the other by glossarial records. Men of erudition are seldom men of genius. The exploring mind is ever anxious to take flight from the prison-house of

scholastic restraints. Scepticism, moreover, is frequently the result of deep study, which leads the neophyte into such a labyrinth of conflicting opinions, that decision and conviction are not easily attained. Laugier, a most learned German physician, had no faith in his profession: being reproached with his incredulity, he replied, "*Credo, Domine, adjuva incredulitatem meam.*"

The preceding observations lead to an important, and at the same time a painful reflection. Will this rapid intellectual progress tend ultimately to meliorate the condition of mankind? Nations have been compared to Man: having once reached the acme of prosperity and strength, their vigour like his gradually declines. History offers nothing more than a chronicle of such facts. Whatever may be the causes of this degeneracy, is a matter foreign to my present subject; although I may be permitted to observe by the way, that it may have arisen from the great disparity and inequality in the condition of society that tends to lull the wealthy into apathetic indifference and blind security in their power, while it urges the poor and the bold to rapine and destructive deeds. This perilous state can only cease to exist when general education is improved: if this most important source of real prosperity is attended to, we perhaps need not seek in particular events gloomy anticipations of the future.

Whatever may be the destinies of nations in the wreck of empires and the destruction of men, the philosopher, calmly seated on ruins that often “speak that sometime they were a worthy building,” reflects with pride that science has withstood the withering hand of time. It is true, that in every study errors have been heaped upon errors; but truth will often result from falsehood, and doubt that brings on investigation, leads to comparative certainty. Locke has justly observed, that “the faculty of reasoning seldom or never deceives those who trust to it: its consequences, from what it builds on, are evident and certain; but that which it oftenest, if not only, misleads us in, is, that the principles from which we conclude, the grounds upon which we bottom our reasoning, are but a part—*something* is left out which should go into the reckoning to make it just and exact.” This *something* is the constant pursuit of the philosopher. The name of a country may be obliterated from a map, the deeds of heroes be effaced from the annals of the world; the pursuit of truth can only cease when man is no more;—its light may be veiled by ignorance, craft, or cupidity,—but it cannot be extinguished. The cities that gave birth to the illustrious philosophers of old have long ceased to exist, yet the immortal works of those sages that have escaped the ravages of time are still as fresh and as luxu-

riant as when their glorious oratory enchanted and captivated their disciples' ears.

No science has been cultivated with more difficulty than that of Medicine. The following papers will show how fearfully it has had to contend in turn with the power of priestcraft, that sought to monopolise its practice, as a privilege from the gods, and with the furious opposition of contemporary members of the profession, whose cupidity and vanity were alarmed by the introduction of novel doctrines, which they were too old, too busy, or too obstinate to learn. The extracts from Medical Literature that I have given will show that most of our modern notions were known to the earliest writers, and were only improved in succeeding ages, as in like manner our present doctrines will in all probability be advanced by future generations. The destruction of kingdoms and of chronicles, the inroads of barbarism,—the more destructive inroads of ignorance and bigotry, have not been able to produce a void in the world of science; the catenation of philosophic inquiry has never been broken in its connexions. Oppression but riveted the chain more firmly, as if to resist the united power of man and time. Adversity, which

Like the toad, ugly and venomous,
Wears yet a precious jewel in its head,—

has always been considered the best school of practical wisdom: and it is thus that amidst

the portentous events which have shaken every institution, and which perhaps still menace further dissolution, the fane of science has oftentimes been more vividly illumined by the surrounding conflagration.

The evils that desolate society too frequently arise from the hasty acts of intemperate men, who deem it necessary to meet the tumultuous demands of the multitude with decided and energetic, but, at the same time, perilous measures: the progress of science, on the contrary, is gradual, and of course more likely to be eventually permanent. While political speculations are daily becoming more uncertain in their operations, the triumph of intellectual superiority over prejudice is everywhere apparent;—unjust disabilities are being abolished, and the gates of learning thrown open to every candidate, whatever may be his religious or his political tenets.

In our country, more than in any other, industry and perseverance have ever had a fairer chance of attaining social pre-eminence, despite the shackles imposed upon the candidate for fame by institutions framed in the darker ages. What then may we not expect, when we behold the bright era that opens before us,—when those institutions will be considered the obsolete and musty remnants of expiring bigotry and intolerance!

May we not indulge in the most sanguine hope, that our former glories are only the historic earnest of still more glorious days? If the spirit of the immortal Locke could hover o'er our earth, he would feel, with some degree of pride, that his admonitions have not been unheeded; and that "those who live mewed up within their own contracted territories, and will not look abroad beyond the boundaries that *chance*, *conceit*, or *laziness* have set to their inquiries, but live separate from the notions, discourses, and attainments of the rest of mankind," have at last felt the necessity of yielding to the voice of reason, or rather of their own welfare.

In the following sheets I merely rank myself as a compiler. I have only sketched—sometimes perhaps with too fanciful a pencil, subjects of great importance, which, by being thus popularised, may induce abler hands to embody them in a more permanent form. The variety of matter has obliged me to be discursive, and to have recourse to some repetitions that were necessary to illustrate subjects not easily abridged. Whenever I have held up errors and evil passions to exposure, I have not, in one single instance, I trust, been influenced by any hostility towards men or parties—ranks or creeds. If I have unwillingly and unwittingly given offence, I shall most sincerely lament it. My materials

have been gleaned from the works of many contemporaries, whose well-known and justly-appreciated names will in general appear: but I should be wanting in candour, did I not avow that I have derived much valuable information from *Le Dictionnaire des Sciences Médicales*, an elaborate compilation, containing more "CURIOSITIES OF MEDICAL EXPERIENCE" than any existing work.

48, *Eaton Square*,
January, 1837.

CONTENTS

OF

THE FIRST VOLUME.

	Page
Obesity	1
Dwarfs	13
Gigantic Races	19
Unlawful Cures	31
Voice and Speech	51
Ecstatic Exaltation	61
Varieties of Mankind	68
On the Inhumation of the Dead in Cities	85
Buried Alive	100
Spontaneous Combustion	104
Brassica Eruca, or the Rocket Plant	108
Cagliostro	110
Lunar Influence on Human Life and Diseases	113
Spectacles	120
Leeches	121
Somnambulism	125
Medical Powers of Music	130
The Food of Mankind, its Use and Abuse	139
Influence of Imagination	175
Phrenology	190
Perfumes	192
Love Philters and Potions	201
Ventriloquism	214
Chaucer's Description of a Physician	219
Dæmonomania	221

	Page
The Plague	242
Abstinence	267
Poison of the Upas, or Ipo	276
Homophagous and Polyphagous	283
Causes of Insanity	296
Leprosy	309
The Aspic	320
Selden's Comparison between a Divine, a Statesman, and a Physician	324
The Lettuce	326
Medical Fees	328
Enthusiasm	336
Early Rising	358
Medicinal effects of Water	359
Proverbs and Sayings regarding Health and Disease	371
The Night-Mare	375
Incubation of Diseases	384
Quackery and Charlatanism	389
On the Use of Tea	399

CURIOSITIES

OF

MEDICAL EXPERIENCE.

OBESITY.

VARIOUS are the opinions concerning the cause of excessive corpulence. By some it is attributed to too great an activity in the digestive functions, producing a rapid assimilation of our food; by others, to the predominance of the liver: while indolence and apathic sloth, such as is commonly observed in the wealthy monastic orders, are considered as occasioning a laxity of fibre favourable to this embonpoint. Boileau has thus described one of these fat lazy prelates, who

Muni d'un déjeûner,
Dormant d'un léger somme, attendait le dîner.
La jeunesse en sa fleur brille sur son visage;
Son menton sur son sein descend à triple étage;
Et son corps ramassé, dans sa courte grosseur
Fait gémir les coussins sous sa molle épaisseur.

It is certain that exercise, anxiety of mind, want of sleep, and spare food, are circumstances

opposed to fatness. This fact is illustrated by Shakspeare, when Cæsar says to Antony,

Let me have men about me that are fat,—
Sleek-headed men, and such as sleep o' nights;
Yon Cassius has a lean and hungry look,
He thinks too much : such men are dangerous.

Antony and Dolabella were both men of some corpulence.

Fat is a fluid similar to vegetable oils, inodorous, and lighter than water; besides the elements common to water, to oils, and wax, it contains carbon, hydrogen, and sebacic acid, which is pretty similar to the acetic. Human fat, like that of all other animals, has been frequently employed for various purposes. A story is told of an Irish tallowchandler, who, during the invasion of Cromwell's army, made candles with the fat of Englishmen, which were remarkable for their good quality; but when the times became more tranquil, his goods were of an inferior kind, and when one of his customers complained of his candles falling off, he apologised by saying, "I am sorry to inform you that the times are so bad that I have been short of Englishmen for a long time."

Obesity may be considered a serious evil, and has exposed corpulent persons to many *désagrémens*. The ancients held fat people in sovereign contempt. Some of the Gentoos enter their dwellings by a hole in the roof; and any fat person who

cannot get through it, they consider as an excommunicated offender who has not been able to rid himself of his sins. An Eastern prince had an officer to regulate the size of his subjects, and who dieted the unwieldy ones to reduce them to a proper volume. There are, however, cases on record, where unwieldiness led to consideration: the corpulent antiquarian Grose was requested by his butcher to tell all his friends that he bought his meat from him; and the paviours of Cambridge used to say, "God bless you, sir!" to a huge professor when he walked over their work. Fatness has often been the butt of jocularities. Dr. Stafford, who was enormously fat, was honoured with this epitaph:

Take heed, O good traveller, and do not tread hard,
For here lies Dr. Stafford, *in all this church-yard.*

And the following lines were inscribed on the tomb of a corpulent chandler:

Here lies in earth an honest fellow,
Who died by fat and lived by tallow.

Dr. Beddoes was so uncomfortably stout that a lady of Clifton used to call him "the walking feather-bed." At the court of Louis XV. there were two lusty noblemen, related to each other: the king, having rallied one of them on his corpulency, added, "I suppose you take little or no exercise." "Your majesty will pardon me," replied the bulky duke, "for I generally walk two or three times round my cousin every morning."

Various ludicrous anecdotes are related of fat people; amongst others, a scene between Mrs. Clive and Mrs. Pritchard, two corpulent actresses, must have been amusing. They were playing in the parts of Lady Easy and Edging, in the *Careless Husband*, when the former desires Edging to pick up a letter she had dropped; and Mrs. Clive, who might as well have attempted to raise a hundred pound weight, exclaimed, "Not I indeed, take it up yourself if you like it." This answer threw the audience into roars of laughter, when Mrs. Pritchard replied, "Well, if you won't take up the letter, I must find some one who will;" and so saying, she beckoned to a servant in the wing, who came forward and terminated the dispute.

In some countries, especially in the East, moderate obesity is considered a beauty, and Tunisene young ladies are regularly fattened for marriage; a different practice from that of the Roman matrons, who starved their daughters, to make them as lean as possible on such occasions. Thus Terence,

Nostræ virgines—si bono habitu sunt, matrespugiles esse aiunt et cibum deducunt.

Erasmus states that the Gordii carried their admiration for corpulence to such an extent, that they raised the fattest amongst them to the throne. It is well known that the preposterous size of some of the Hottentots is deemed a perfection,

and one of their Venuses was not long since exhibited in London.

There is no doubt that food materially influences this condition of mankind, although we frequently see enormous eaters who are miserably lean, and fat persons whose diet is most scanty. During the late war, a ravenous French prisoner was known to eat four pounds of raw cow-udder, ten pounds of raw beef, and two pounds of candles, per diem, diluting his meals with five quarts of porter; yet this carnivorous brute was a perfect skeleton.

For the cure of corpulency, diminution of food of a nutritious nature has been generally recommended; added to this, little sleep and much exercise are advised. Acids to reduce fatness are frequently administered, but have done considerable mischief. Amongst other wonderful accounts of their efficacy in such cases, it is related of a Spanish general who was of an enormous size, that he drank vinegar until his bulk was so reduced that he could fold his skin round his body.

For a similar purpose soap has been frequently recommended, particularly by Dr. Flemyng. He began this experiment with one of his patients who weighed twenty stone and eleven pounds (jockey weight): in July 1754, he took every night a quarter of an ounce of common Castile soap. In August 1756 his bulk was reduced two

stone, and in 1760 he was brought down to a proper condition.

Darwin is of opinion that salt and salted meat are still more efficacious than soap. All these experiments, however, are in general not only useless but pernicious, and frequently prove fatal. Mr. Wadd, from whose curious work on corpulence much is extracted in this article, properly observes that, 'certain and permanent relief is only to be sought in rigid abstemiousness, and a strict and constant attention to diet and exercise.' Dr. Cheyne, who weighed thirty-two stone, reduced himself one-third, and enjoyed good health till the age of seventy-two. Numerous instances of the kind are mentioned, where journals of gradual reduction were kept: the following is an abstract of one of them, in the case of a person who, on the 17th June 1820, weighed twenty-three stone two pounds.

June 17	...	23 stone 2 pounds.
July 27	...	21 " 10 "
September 10	...	20 " 7 "
October 10	...	19 " 3 "
November 10	...	18 " 11 "
December 10	...	18 " 4 "
December 25	...	18 " 1 "

In another case, attended by Dr. Gregory of Edinburgh, the patient weighed twenty-three stone, and by a regular system of diet was brought down to fifteen stone. In this instance brown bread, with a certain quantity of bran in it, was

employed; and it is well known that the alimentary secretions are materially altered by the quality of bread. The article of drink also requires much attention. Corpulent persons generally indulge to excess, and in this case every endeavour to reduce them will be vain. We frequently see our jockeys reducing themselves to the extent of a stone and a half in the week. A lower scale of diet is by no means as injurious as it is generally supposed; the English prisoners made by Tippoo Saib, though kept upon a scanty pittance of bread and water, found themselves in better health than before, and some of them were cured during their captivity of liver complaints of long and severe duration.

One of the most corpulent persons known was Mr. Lambert, of Leicestershire, who weighed fifty-two stone eleven pounds (14lbs. to the stone.)

At Hainton, there died in 1816, Samuel Sugars, aged fifty-two; and his body, with a single coffin, weighed fifty stone.

In 1754 died Mr. Jacob Powell, of Stebbing in Essex: his body was above five yards in circumference, and weighed five hundred and sixty pounds; requiring sixteen men to bear him to his grave.

In 1775 Mr. Spooner, of Skillington near Tamworth, weighed, a short time before his death, forty stone and nine pounds, and measured four feet three inches across the shoulders.

Keysler mentions a young man in Lincoln who ate eighteen pounds of beef daily, and died in 1724, in the twenty-eighth of his age, weighing five hundred and thirty pounds.

A baker, in Pye Corner, weighed thirty-four stone, and would frequently eat a small shoulder of mutton, baked in his oven, and weighing five pounds; he, however, persisted for one year to live upon water-gruel and brown bread, by which he lost two hundred pounds of his bulk.

Mr. Collet, master of the Evesham Academy, weighed upwards of twenty-six stone; when twelve years old, he was nearly as large as at the time of his death. At two years of age he required two nurses to lift him in and out of bed, one of whom in a fit of anger he felled to the floor with a blow of his hand.

At Trenaw in Cornwall, there was a man, known by the name of Grant Chillcot, who weighed four hundred and sixty pounds; one of his stockings could contain six gallons of wheat.

Our poet Butler must have met with some such enormous creatures in the type of his Saxon Duke, who, in *Hudibras*,

——— did grow so fat,
That mice (as histories relate)
Ate grots and labyrinths to dwell in
His postique parts, without his feeling.

If obesity has been the subject of ungenerous jokes, leanness has not passed unnoticed. An

anecdote is related of a reverend doctor of a very ghostly appearance, who was one day accosted by a fellow with the following salutation: "Well, doctor, I hope you have taken care of your *soul*?" "Why, my friend?" said the divine. "Because," replied the impertinent interlocutor, "your *body* is not worth caring for."

A poor diminutive Frenchman being ordered by his Sangrado to drink a quart of ptisan a day, replied, with a heavy sigh, "Alas! doctor, that I cannot do, since I only hold a pint."

When the Duke de Choiseuil, a remarkably meagre man, came to London to negotiate a peace, Charles Townshend being asked whether the French government had sent the preliminaries of a treaty, answered, "He did not know, but they had sent the *outline of an ambassador*."

That change of spare diet to a more nutritious food may bring on some corpulence, is mentioned in an anecdote of Colly Cibber, who relates that a poor half-starved actor, who used to play the Apothecary, in *Romeo and Juliet*, to the life and with great applause, received an augmentation of salary in consequence of his popularity. Unfortunately, increase of wealth led him to increase his fare, until he gradually assumed a plumpness which unfitted him for the worn-out pharmacopolist; and not being able to perform in any other line, the poor man was discharged. However, poverty once more brought him down

to his original condition, when he re-appeared upon the boards as triumphantly as ever.

If embonpoint is generally a sign of good-humour and a cheerful disposition, leanness frequently betokens a sour, crabbed, and ill-natured character. Solomon has said, "A merry heart doeth good like medicine; but a broken spirit drieth the bones." This observation, however, cannot be considered a rule in forming a judgment of various tempers. This is by no means an easy attempt in our intercourse with the world, when physiognomy is not always a sure guide in the selection of our companions. Dr. Franklin tells a singular story on this subject :

"An old philosophical gentleman had grown, from experience, very cautious in avoiding ill-natured people. To endeavour to ascertain their disposition he made use of his legs, one of which was remarkably handsome, the other by some accident crooked and deformed. If a stranger at the first interview regarded his ugly leg more than his handsome one, he doubted him; but if he spoke of it, and took no notice of his handsome leg, that was sufficient to determine the philosopher to have no further acquaintance with him. Everybody has not this two-legged instrument; but every one, with a little attention, may observe signs of this carping, fault-finding disposition, and take the same resolution of avoiding the acquaintance of those infected by it. I therefore advise

those querulous, discontented, unhappy people, if they wish to be respected and beloved by others, and happy in themselves, *to leave off looking at the ugly leg.*"

Various expedients, in addition to a better diet, have been resorted to, to restore lean persons to a better case; but amongst the most singular that we have on record is that of flagellation. Galen says, that horse-dealers having been observed to fatten horses for sale by flogging them, an analogous method might be useful with spare persons who wish to become stouter. He also mentions slave-dealers who employed similar means. Suetonius informs us that Musa, the favourite physician of Augustus, used to fustigate him, not only to cure him of a sciatica, but to keep him plump. Meibomius pretends that nurses whip little children to fatten them, that they may appear healthy and chubby to their mothers. No doubt but flagellation determines a greater influx of blood to the surface, and may thus tend to increase the circulation, and give tone to parts which would otherwise be languid. With this intention, *urticatio*, or whipping with nettles, has been frequently used in medical practice with great advantage. Xenophon thawed his frozen soldiers by flagellation. In amorous despondency and grief, Cœlius Aurelianus recommended this process, and Elidœus Paduanus preconises it to bring out tardy eruptions. The most singular

effect of this castigation is recorded by Meibomius, in his work *De flagrorum usu*, &c. dedicated to a councillor of the Bishop of Lubeck, with the following epigraph,—

Delicias pariunt Veneri crudelia flagra.

Dum nocet, illa juvat; dum juvat, ecce nocet.

Menghus Faventinus had long before extolled this practice, mentioned also by Coelius Rhodiginus, and various ancient writers, and more recently recognised as effectual by Rousseau in his Confessions.

A remarkable case of leanness is mentioned by Lorry in a priest, who became so thin and dry in all his articulations, that at last he was unable to go through the celebration of mass, as his joints and spine would crack in so loud and strange a manner at every genuflexion, that the faithful were terrified, and the faithless laughed. One of these miserable laths once undertook a long journey to consult a learned physician on his sad condition, and having begged to know, in a most piteous tone the cause of his desiccation, was favoured with the following luminous answer: "Sir, there is a predisposition in your constitution to make you lean, and a disposition in your constitution to keep you so." Another meagre patient being told that the celebrated Hunter had fattened a dog by removing his spleen, exclaimed with a deep sigh, "O, sir! I wish Mr. Hunter had mine."

DWARFS.

WE can scarcely believe that the ancients gave any credence to the fabulous accounts of dwarfish nations, or could be persuaded of the existence of those pigmies spoken of by Aristotle and other writers, who in all probability described as such a species of diminutive monkeys.

Athenæus mentions a race of dwarfs who were in perpetual war with cranes, who harnessed partridges to their chariots, and were obliged to cut down corn with felling axes, like forest trees. Pliny asserts that their constant enemy the crane drove them out of Thracia, but that they still were to be met with in Ethiopia, near the source of the Nile and above the rise of the Ganges, where they were named *Spithania*, their stature not exceeding three palms. Strabo, however, judiciously observed that these stories arose from the circumstance of the small size of every animal in intemperate regions. Various modern travelers have recorded the most absurd stories of diminutive men, as well as of gigantic nations; but to most of them we may apply the words of Congreve—

Fernandez Mendez Pinto was but a type of thee,
Thou liar of the first magnitude.

It is nevertheless true that man exhibits differences of stature in various climes. The Laplanders and Samoïdes in Europe, the Ostiacks and Tungoosees in Asia, the Greenlanders and Esquimaux in America—all the natives indeed of high northern latitudes are remarkably short, measuring little more than four feet; and Niels Sara, the Laplander mentioned by Von Buch in his Travels, and who measured five feet eight inches, may be considered as a gigantic exception. It had been reported by travellers, that a nation of white dwarfs called *Quimos*, or *Kimos*, existed in the interior of Madagascar; but Flacourt has positively denied the fact, although Commerson, the naturalist of Bougainville, and De Modave, confirm the former statement.

It is by no means evident that climate or any external agency invariably produces this effect; for in the very regions inhabited by the stunted Hottentot, the shortest race in Africa, since the Bosjerman tribe scarcely ever exceed four feet, we find the strong and tall Kaffer. Amongst these it is also to be remarked, that there exists a singular difference between the sexes. Langsdorff thus expresses himself on the subject: "The Kaffer women were mostly of low stature, very strong-limbed, and particularly muscular in the leg: the men, on the contrary, were the finest

figures I ever beheld ; they were tall, robust, and muscular. A young man of about twenty, of six feet ten inches high, was one of the finest figures that perhaps was ever created. He was a perfect Hercules, and a cast from his body would not have disgraced the pedestal of the deity in the Farnese Palace." He further adds, "There is perhaps no nation on earth, taken collectively, that can produce so fine a race of men as the Kaffers : they are tall, stout, muscular, well-made, elegant figures. They are exempt, indeed, from many of those causes that in more civilised societies contribute to impede the growth of the body. Their diet is simple, their exercise of a salutary nature ; their body is neither cramped nor encumbered by clothing ; the air they breathe is pure ; their rest is not disturbed by violent love, nor their minds ruffled by jealousy ; they are free from those licentious appetites which proceed frequently more from a depraved imagination than a real natural want. Their frame is neither shaken nor enervated by the use of intoxicating liquor ; they eat when hungry, and sleep when nature demands it. With such a kind of life, languor and melancholy have nothing to do. The countenance of a Kaffer is always cheerful, and the whole of his demeanour bespeaks content and peace of mind."

Are diminutive races more productive than those of stronger formation ? The brute creation

has been taken as an example in support of this opinion; large animals producing one or two young ones, while the smaller species are singularly prolific. The lioness seldom brings forth more than two or four whelps, the cat will have a litter of eight or ten kittens; the pullulation of insects is incredible. But is not this circumstance an illustration of the wisdom of Providence? If the larger species were as abundant as the lesser races, where could they find sustenance in regions where the produce is, under the influence of the seasons, occasionally abundant or scarce? In the ocean this is not the case; the myriads of its creatures suffice to support each other, and we therefore meet in the deep the largest of animals in numerous shoals, while the small fry are generated in marvellous abundance.

That the facility of obtaining food and the nature of the nutritious substances that animals may find, influence their stature, is evident. In sandy and arid plains poor in pasture, we find horses and cattle of a stunted breed: the herds of Flanders widely differ from those of Wales and of the Ukraine, and the Scotch and Welsh cattle cannot be compared to those of Holstein. At the same time, it must be observed, that in regard to dwarfs, although it frequently does occur that they are labouring under a hereditary lowness of stature, this is not invariably the case. In these instances dwarfs may be considered as morbid

phenomena. Thus Bebe, the dwarf of Stanislaus of Poland, who was thirty-three French inches high, was weak, of delicate health, became deformed as he grew up, and died at the age of twenty-three: his parents were of the usual stature: whereas the Polish nobleman Borwlaski was well-made, active, intelligent: he measured twenty-eight inches; and he had a brother of thirty-four inches, and a sister of twenty-one. Stöberin, of Nürenberg, was nearly three feet high at twenty, well-proportioned, and possessing a cultivated mind: his parents, brothers, and sisters, were all dwarfs. Such natural dwarfs have been known to evince brilliant qualities. Uladislas, king of Poland, surnamed *Cubitalis* from his only measuring a cubit in height, was renowned for his warlike exploits; and we find a dwarf of the name of Kasan, a khan of Tartary, boldly leading their enterprising bands. These individuals sprung from dwarfish parents; whereas the dwarfs we generally meet with are deformities of nature; their head is voluminous, their intellectual faculties obtuse, they are mostly childish in their ideas and pursuits, and are rarely able to propagate their race. Held in contempt by the people, they naturally become peevish and irritable; and the diminutive names given to them to match their apparent natural imperfection tend constantly to increase their irritability. Thus the Latins called them *Homunciones*, the Italians *Piccoluomini*, the Flemings *Mennekin*, — whence, no

doubt, our term *Mannikin* given to little men, and *Minikin* applied to small pins. A very curious case of a dwarf born from parents of the usual stature was exhibited in Paris in 1819: her name was Anne Souvray; she was born in the Vosges, and was only thirty-three inches in height. She was at that period seventy-three years of age; was gay, animated, good-humoured, and danced with tolerable grace with her sister Barbe, seventy-five years of age, and taller than her by two inches. In 1761, King Stanislaus wanted to marry her to his Bebe; the bridegroom, however, did not live to contract so desirable a match; but, faithful to her lover, she ever afterwards called herself *Madame Bébé*.

GIGANTIC RACES.

WHILE we dismiss as fabulous all ancient and modern accounts of dwarfish races, we must also treat with the same scepticism the relations of gigantic nations. Although individuals of incredible stature have been occasionally seen, the word giant must be considered not only comparative as regarding primary races, but in many instances allegorical. Thus the Hebrew word, *Nophel* and *Giboor*, (*Nephilim* and *Gibborim* in the plural,) did not signify giants, as commonly translated, but cruel and violent men. Athletic power and uncommon energies were naturally associated with the idea of supernatural stature, though intellectual accomplishments were not always included in the association: on the contrary, we find the ancient axiom *Homo longus rarè sapiens* frequently adduced.

In temperate climates the height of the human race averages from four feet and a half to six feet, but occasional instances have been met with of men reaching eight and nine feet—nay, some authors go so far as ten and eighteen; but the latter assertions seem to refer to fossil bones attributed to man, but which evidently belonged to

other animals. Buffon mentions gigantic human bones discovered at Lucerne, but which upon examination Blumenbach pronounced to be the remains of an elephant. Halicot, in his work called *Gigantosteologia*, describes bones found in a sepulchre in Dauphiny over which was a stone inscribed TEUTOBOCCHUS REX: this skeleton was twenty-five feet and a half high, and ten feet broad at the shoulder. Riolan, the celebrated anatomist, disputes the fact; and in his book entitled *Gigantomachia* positively affirms that they also belonged to an elephant. It is worthy of remark, that in this controversy each party considered his opinion and decision of sufficient weight to need no illustration, and therefore neither of them thought it necessary to confirm his *divit* by drawings and engravings of the questionable remains. Such is the vanity of the learned! An infallible philosopher informs us that Adam's stature was one hundred and twenty-three feet nine inches; Eve's, one hundred and eighteen feet nine inches and three quarters; Noah's, twenty feet short of Adam's; Abraham's, twenty-eight feet; Moses', thirteen; and Hercules', ten.

That the first races of man were of larger dimensions than those of our contemporaries, has ever been a general opinion. Thus Virgil in his *Georgics*:

Grandiaque effossis mirabitur ossa sepulchris.

Lucretius ascribes the same superiority to animals.

Jamque adeò fracta est ætas, effœtaque tellus
 Vix animalia parva creat, quæ cuncta creavit
 Sæcla, deditque ferarum ingentia corpora partu.

And again the Mantuan poet,

Sic Omnia fatis
 In pejus ruere, ac retrò sublapsa referri.

Not only have our forefathers been considered more gigantic in stature, but of more vigorous power. Hence Juvenal says,

Nam genus hoc, vivo jam decrescebat Homero.
 Terra malos homines nunc educat, atque pusillos.

It is however obvious, that former races, although they might have excelled the present generation in vigour from the nature of their education and pursuits, could not claim any preeminence in stature. The remains of human bones, found in tombs and Egyptian mummies, demonstrate this fact most clearly; and the armour, helmets, and breastplates of the ancients confirm it. Their swords were as light, nay, much lighter in many instances, than those of the present day; and those enormous ones of the times of chivalry were only wielded to inflict one overwhelming blow with both hands, and could scarcely be recovered for protection.

Ancient writers corroborate this opinion. Homer when speaking of a fine man gives him four cubits in height and one in breadth. Vitruvius fixes the usual standard of man at six Roman feet: the giant Gabbarus mentioned by Pliny did

not exceed nine feet. Aristotle's admeasurement of beds was six feet; and certainly the door-ways of ancient edifices by no means indicated taller inmates than our present generation. It is therefore pretty clear that the supposed fossil remains of gigantic human bones belonged to the *Megatherium*, the *Palæotherium*, and other individuals, which certainly prove that in remote ages there existed animals of much larger dimensions than any now in being, though we have no reason to suppose that this variety extended to our species.*

The origin of the fabled giants has led to marvellous disquisitions. Many fathers of the church, amongst whom we may quote St. Cyprian, St. Ambrosius, St. Chrysostom, St. Cyrillius, Lactantius, Tertullian, and several others, gravely maintain that giants were the favoured offsprings of holy maidens and angels. This may seem an impious conclusion, since the gigantic monsters of sacred history were anything but angelic; for the Canaanians, the Moabites, and the sons of Anak, descended from giants, (compared with whom the Israelites seemed as grasshoppers,) were most ferocious, and their land devoured its inhabitants; (though Neuman gives a different signification to the scriptural passage, which accord-

* The *Homo diluvii testis*, the skeleton of which was described by Scheuchzer, was considered by Cuvier to have belonged to a species of Salamander.

ing to his paraphrase merely meant "that the number of inhabitants was so great, that they eat up all the land;") Og, king of Bashan, whose country was delivered into the hands of Israel, had an iron bedstead nine cubits in length and four cubits in breadth; and Goliath, the reproach of Israel, was six cubits and a span (which according to Cumberland makes eleven feet English) in stature. It is therefore difficult to imagine why so many saints considered giants as an angelic progeny.

To the present day, however, we find various races distinguished by their elevated stature. Humboldt says, that the Guayaquilists measure six feet and a half, and the Payaguas are equally tall, while the Caribbees of Cumana are distinguished by their almost gigantic size from all the other nations he had met with in the New World. Hearne saw in the cold regions north of Canada individuals of six feet four inches. The Patagians, or Tehuels, were stated by Pigafitta and the Spanish early navigators as measuring seven feet four inches; and although it appears that this account is exaggerated, more recent travellers, amongst whom we may name Bougainville, Commodore Byron, Captain Wallis, Carteret, and Falkner, affirm that their height ranges from six to seven feet.

From the best authenticated observations, it appears that the tallest persons on respectable re-

cord did not, according to Haller, exceed nine feet. A young man from Huntingdonshire was exhibited in London, and measured about eight feet at the age of seventeen: he was, as usual, born of the ordinary size, but began to grow most rapidly; his sister was of great height, and all his family were remarkably tall.

Dwarfs generally die from premature old age, and giants from exhaustion. A curious instance of marvellous growth is recorded in a tract called "*Prodigium Willinghamense*," or an account of a surprising boy who was born at Willingham, near Cambridge, and upon whom the following epitaph was written:—"Stop, traveller, and wondering, know, here buried lie the remains of Thomas, son of Thomas and Margarèt Hall; who, not one year old, had the signs of manhood; at three, was almost four feet high, endued with uncommon strength, a just proportion of parts, and a stupendous voice; before six, he died as it were at an advanced age." Mr. Dawker, a surgeon of St. Ives, Huntingdon, who published this account, viewed him after death, and the corpse exhibited all the appearances of decrepit old age. This is a confirmation of the case of the boy of Salamis, mentioned by Pliny as being four feet high, and having reached puberty at the age of three; and may also confirm the account of the man seen by Craterus, the brother of Antigonus, who in seven

years was an infant, a youth, an adult, a father, an old man, and a corpse.

The experiment of Dr. Berkeley, bishop of Cloyne, to ascertain the influence of food in promoting extraordinary growth, is curious. He selected for this purpose an orphan child of the name of Macgrath ; and by dint of feeding, at the age of sixteen he had grown to the height of seven feet ; but his organisation had been so exhausted by this forced process, that he died in a state of moral and physical decay at the age of twenty.

In the development of organised bodies, the effects of light contribute materially. Dr. Edwards, an English physician in Paris, and one of our most distinguished physiologists, has shown that by excluding tadpoles from the light, they will grow to double and triple their ordinary size, but are not metamorphosed into frogs. He thinks that the *Proteus Anguinus* is the first stage of an animal prevented from growing to perfection by inhabiting the subterraneous waters of Carniola.

The influence of food on the changes of animals is further shown in the aphidivorous flies, that are larvæ for eight or ten days, pupæ for about a fortnight, and perfect insects in about the same time, in the whole living about six weeks ; whereas a pupa deprived of food underwent no change, and lived for twelve months. Rapid development

of the organism invariably brings on premature dissolution. A case is recorded of a girl who cut four teeth at the end of the first fortnight ; walked about and had hair reaching to the middle of her back after the seventh month ; exhibited signs of puberty at the ninth month, but perished in a state of exhaustion in her twelfth year. Dr. Comarmond, of Lyons, relates the case of a female infant who was perfectly developed at the age of twenty-seven months, but she sank under rachitis when she had attained her twelfth year.

Precocious mental attainments are frequently as destructive of life as a rapid growth. The wonderful Baratier, at the age of four, spoke and read Latin, French, and German ; was an excellent Greek scholar at six ; and when ten years of age, translated the Scriptures from the Hebrew ; at nineteen he died of exhaustion. The vulgar saying, " The child is too clever to live," is founded upon observation. These early specimens of superior intellect are sometimes followed by a state of imbecility. Antiochus tells us that Hermogenes, who was a celebrated rhetorician at fourteen years, was ignorant in the extreme at twenty-four ; and of him it was said,

In pueritiâ senex, in senectute puer.

Tall men generally produce children of high stature. The celebrated grenadier guards of Frederick William, in the words of Dr. Johnson, "*propagated procerity* ;" and the inhabitants of

Potsdam are remarkable for their height. Haller states that his own family were distinguished by their tallness, without excepting one single grandchild, although they were very numerous.

In the hereditary transmission of physical and moral qualities, many curious observations have been made. Women of high mental attainments have been known to produce children of genius, more frequently than men of a superior intellect; although Haller relates the singular case of two noble females who married wealthy idiots on account of their fortunes, and from whom this melancholy defect had extended for a century into several families, so that some of all their descendants still continued idiots in the fourth and fifth generation. Horace had observed this tendency to produce offsprings resembling their parents,

Fortes creantur fortibus et bonis :
Est in juvencis, est in equis patrum
Virtus : nec imbellem feroces
Progenerant aquilæ columbam.

This remark, however, is more applicable to physical transmissions, and certain peculiarities characterise whole families. Pliny mentioned examples of six-fingered families, who bore the name *Sedigita*. C. Horatius had two daughters with a similar deformity. Mr. Carlisle knew a family in which supernumerary toes and fingers were observed for four generations: they were introduced by a female who had six fingers

on each hand, and as many toes on each foot. From her marriage with a man naturally formed, were produced ten children, with a supernumerary member on each limb; and an eleventh, in which the peculiarity existed in both feet and one hand, the other hand being naturally formed. The latter marrying a man of ordinary formation, they had four children, of which three had one or two limbs natural, and the rest with the supernumerary parts; while the fourth had six fingers on each hand, and as many toes on each foot. The latter married a woman naturally formed, and had issue by her eight children; four with the usual structure, and the same number with the additional fingers and toes: two of them were twins, of which one was naturally formed, and the other six-fingered and six-toed.—The well-known porcupine family, that were exhibited in London and elsewhere, is a remarkable example of hereditary transmission of organic peculiarities. They were all covered with dark-coloured horny excrescences, which they shed annually in the autumn or winter. Their names were Lambert. Two brothers, John and Richard, grandsons of the original porcupine men, were shown in Germany.—One of these unsightly individuals, who was shown some time ago in Bond-street, stated that he was descended from the fourth generation of a savage found in the woods of America; and he further asserted that the females of the family

were exempted from this lucrative but uncomfortable peculiarity : all the males had them, and shed them regularly until the thirty-sixth year, when these species of quills grew to a considerable length. We have examples of bristly hair being shed in a whole family every autumn.

Amongst animals, gigantic races no longer inhabit the regions which bore them in ancient times. An extensive whale-fishery was once carried on at Biariz, in the Gulf of Gascony ; and the hippopotamus is no longer to be seen on the banks of the Nile.

Gigantic bones having been occasionally discovered with the remains of men and horses and fragments of armour, it has been imagined that in ancient times armies were attended by terrific giants ; but it is more than probable that these large fragments of departed warriors most probably belonged to their war-elephants, which with their horses were not unfrequently immolated on their master's tomb.

Skeletons of giants were considered by the ancients as curious as in the present day ; and those of Secondilla and Pusio were carefully preserved in the gardens of Sallust.

Some naturalists have maintained that giants had more numerous vertebræ than ordinary men ; but this has not been confirmed by observation, nor has it been found that the spinal bones of dwarfs are in smaller number.

Schreber, who has collected the description of the principal modern giants, found few above seven feet and a half; although he mentions a Swedish peasant of eight feet Swedish measure, and one of the guards of the Duke of Brunswick eight feet six inches Dutch. Not so Hakewell, who informs us, from the testimony of Nannez, that the Emperor of China had archers and porters fifteen feet high. Howbeit, Ol. Magnus's account surpasses his; for he tells us of a "*puella—in capite vulnerata, mortua induta chlamyde purpurea, longitudinis cubitorum 50, latitudinis inter humeros quatuor!*"

UNLAWFUL CURES.

ONE can scarcely credit that at any period there could have existed men of science and genius who believed that there were supernatural means of curing disease, did we not even to the present day find imbeciles who verily dread the malpractices of the devil and his vicarious agents. Ancient writers divided their cures into *lawful* and *unlawful*. The former were obtained from divine aid; the latter, from sorcerers, witches, magicians, wizards, and cunning men, who treated all maladies by spells, cabalistic words, charms, characters, images, amulets, ligatures, philtres, incantations, &c.; by which means, according to Cardan, Artesius, Picatrix, and sundry wise men, the afore-said sorcerers and witches could prevent fire from burning, find out thieves and stolen goods, show absent faces in a glass, make serpents lie still, stanch blood, *salve* gout, biting of mad dogs, toothache, *et omnia mundi mala*. "Many doubt," says Nicholas Taurellus, "whether the devil can cure such diseases he hath not made, and some flatly deny it; however, common experience confirms, to our astonishment, that magicians can work such

feats, and that the devil, without impediment, can penetrate through all the parts of our body, and cure such maladies by means to us unknown." Some of these means were rather singular; for St. Austin mentions as one of these processes, "*Agentes cum patientibus conjungunt, colligere semina rerum, eaque materie applicare;*" and learned divines, moreover, inform us, that to resist exorcisms these witches and magicians had St. Catherine's wheel imprinted on the roof of their mouths, or on some other part. Taurellus asserts, that to doubt it is to run into a sceptical extreme of incredulity. Godelman affirms that Satan is an excellent physician; Langius maintains that Jupiter Menecrates was a magician; and Marcellus Donatus pays the same compliment to Solomon, who, he says, "cured all the diseases of the mind by spells, charms, and drove away devils, and that Eleazar did the same before Vespasian."

This fact being clearly ascertained, the next question was whether it was lawful in a desperate case to crave the help of the evil one on the principle

Flectere si nequeunt Superos, Acheronta movebunt.

Paracelsus rather impiously argues that we might, as it matters not, he says, "whether it be God or the devil, angels or unclean spirits, (*immundi spiritus,*) that cure him, so that he be eased. If a man fall in a ditch, what matter is it whether a friend or an enemy help him out? If I be troubled with

such a malady, what care I whether the devil himself, or any of his ministers, by God's permission, redeem me?"—and he therefore concludes, that diseases brought on by *malefices* can only be cured by *incantations*. However, this doctrine was denounced as abominable by Remigius, Bodinus, Godelmannus, Erastus, and various divines and schoolmen; and Delrio plainly declares, "*mori præstat quàm superstitiosè sanari.*" Therefore pontifical writers and sages recommend adjuration and exorcism by "fire, suffumigations, lights, cutting the air with swords (*gladiorum ictus*), sacred herbs, odours," &c. though some hungry devils can only be cast out by fasting.

Witches and impostors, says Lord Bacon, have always held a competition with physicians. Galen complains of this superstition, and observes that patients placed more confidence in the oracles of Esculapius and their own idle dreams than in the prescriptions of doctors. The introduction of precious stones into medical practice owed its origin to a superstitious belief that, from their beauty, splendour, and high value, they were the natural receptacles for *good* spirits. Mystery, in the dark ages, and, alas! even now, increases the confidence in remedial means; reveal their true nature, the charm is dissolved: "*Minus credunt quæ ad suam salutem pertinent si intelligunt,*" said Pliny. One cannot but wonder when we behold men pre-eminent in deep learning and acute observation be-

coming converts to such superstitious practices. Lord Bacon believed in spells and amulets; and Sir Theodore Mayence, who was physician to three English sovereigns, and supposed to have been Shakspeare's Dr. Caius, believed in supernatural agency, and frequently prescribed the most disgusting and absurd medicines, such as the heart of a mule ripped up alive, a portion of the lungs of a man who had died a violent death, or the hand of a thief who had been gibbeted on some particular day. Nauseous medicines have ever been deemed the most efficacious, on the reasoning that as everything medicinal is nauseous, everything that is nauseous must be medicinal. The ancients firmly believed that blood can be staunch'd by charms, the bleeding of Ulysses was stopped by this means; and Cato the Censor has given us an incantation for setting dislocated bones. To this day charms are supposed to arrest the flow of blood:

“Tom Pots was but a serving-man,
But yet he was a doctor good,
He bound his kerchief on the wound,
And with some kind words he staunch'd the blood.”

Sir Walter Scott says, in the “Lay of the Last Minstrel,”—

“She drew the splinter from the wound,
And with a charm she staunch'd the blood.”

The strength of imagination in effecting won-

derful cures has been observed in all ages; and Avicenna declares, "that he prefers confidence before art, precepts, and all remedies whatsoever." Our learned Burton says, "that this strong imagination or conceit is *Astrum Hominis*, and the rudder of this our ship, which reason should steer, but, overborne by phantasie, cannot manage, and so suffers itself and the whole vessel of ours to be overruled and often overturned."

Nothing could be more absurd than the notions regarding some of these supposed cures: a ring made of the hinge of a coffin had the power of relieving cramps; which were also mitigated by having a rusty old sword hung up by the bedside. Nails driven in an oak-tree prevented the tooth-ache. A halter that had served in hanging a criminal was an infallible remedy for a head-ache, when tied round the head; this affection was equally cured by the moss growing on a human skull, dried and pulverized, and taken as a cephalic snuff. A dead man's hand could dispel tumours of the glands by stroking the parts nine times, but the hand of a man who had been cut down from the gallows was the most efficacious. To cure warts, one had nothing to do but to steal a piece of beef from the butcher, with which the warts were to be rubbed; then interring it in any filth, and as it rotted, the warts would wither and fall.

The chips of a gallows on which several persons

had been hanged, when worn in a bag round the neck, would cure the ague. A stone with a hole in it, suspended at the head of the bed, would effectually stop the night-mare; hence it was called a *hag-stone*, as it prevents the troublesome witches from sitting upon the sleeper's stomach. The same amulet tied to the key of a stable-door, deterred witches from riding horses over the country.

Rickety children were cured by being drawn through a cleft tree, which was afterwards bound up, and as the split wood united, the child acquired strength. Creeping through a perforated stone to cure various disorders was a Druidical rite, still practised in the East. In the parish of Marden there is a stone with a hole in it, fourteen inches in diameter, through which children are drawn for the rickets; and, in the North, infants are made to pass through a hole cut in a *groaning* cheese the day of their christening.

Second sight, which, as an hereditary faculty, was deemed a malady, was cured in the Isle of Man, according to Mr. Aubrey's account, by baptizing a child upon the first sight of its head. This ceremony exempts the succeeding generation from the troublesome gift.

It is a melancholy reflection that, at various periods, impostors have impiously called in Scriptural aid to promote their sordid or ambitious views. Chiromancers have quoted the Gospel in

support of their doctrines and adduce the following lines of Job,—“He sealeth up the hand of every man, that all men may know his works:” while, in the like manner, the Holy Inquisition of Spain and Portugal justified their atrocities on the score of the parable of the marriage of the king’s son, in the 22nd of St. Matthew.

Unlawful cures, as they were called, being thus anathematized, lawful ones were resorted to, and the patient was first ordered to pray with due devotion before he took his physic; or, as Burton observes, not one without the other, but both together; for, as he adds, to pray alone, and reject ordinary means, is to do like him in *Æsop*, that, when his cart was stalled, lay flat on his back, and cried out “*Help, Hercules!*” However, *Hyperius* maintains that no physicians can hope for success unless “with a true faith they call upon God and teach their patients to do the like.” *Comineus*, when he addressed the Christian princes after the overthrow of Charles of Burgundy, bade them “first pray with all submission and penitency, confess their sins, and then take physic.”

Another question of importance that led to much controversy was, whether it were lawful to seek the aid of the saints; the learned *Burton*’s remarks on this controverted point are so curious that they are worth relating. “They (the papists) have a proper saint for almost every peculiar infirmity: for poisons, gout, agues, *Petro-*

nella; St. Romanus, for such as are possessed; St. Vitus, for madmen, &c.; and as, of old, Pliny reckons up gods for all diseases. All affections of the mind were heretofore accounted gods: Love and Sorrow, Virtue, Honour, Liberty, Contumely, Impudency, had their temples; Tempests, Seasons, *Crepitus Ventris*, *Dea Vacuna*, *Dea Cloacina*. Varro reckons up thirty thousand gods; Lucian makes Podagra, the gout, a goddess, and assigns her priests and ministers. 'Tis the same devil still, called heretofore Apollo, Mars, Venus, &c.; the same Jupiter, and those bad angels, are now worshipped and adored by the name of St. Sebastian, St. Barbara, &c.; and our Lady succeeds Venus in many offices; and God often winks at these impostures, because they forsake his word, and betake themselves to the devil, as they do, that seek after holy water, crosses," &c.

Amidst this violent denunciation against popery and devilment, evil spirits and saints, it is somewhat singular to find a spirit of anomalous perversity which justifies suicide to rid ourselves of disease and suffering; and these very sanctimonious censors quote ancient and modern authorities to sanction a practice which every Christian must condemn. Let us pursue the disquisition of our learned bookworm Burton:—"Another doubt is made by philosophers, whether it be lawful for a man in such extremity of pain and grief to make away himself, and how those men that do so are to

be censured. The Platonists approve of it, that it is lawful in such cases upon a necessity. Plotinus (*L. de Beatitud.*) and Socrates himself defend it (*in Plato's Phædon*): *If any man labour of an incurable disease, he may dispatch himself, if it be to his good.* Epictetus and Seneca say, *Quamcunque veram esse viam ad libertatem*;—any way is allowable that leads to liberty. *Let us give God thanks no man is compelled to live against his will. Quid ad hominem claustra, carcer, custodia? liberum ostium habet.* Death is always ready at hand: *Vides illum precipitem locum, illud flumen?* There is liberty at hand. *Effugia servitutis et doloris sunt*, as that Laconian lad cast himself headlong, *Non serviam, aiebat puer*; to be freed of misery. Wherefore hath our mother earth brought out poisons (saith Pliny) in so great a quantity, but that men in distress might make away themselves? which kings of old had ever in readiness, *ad incerta fortunæ venenum sub custode promptum.* Many worthy men and women, *quorum memoria celebratur in ecclesiâ*, sayeth Leminctius, killed themselves to save their chastity and honour, when Rome was taken. Jerome, vindicates the same, and Ambrose commendeth Pelagia for so doing. Eusebius admired a Roman matron for the same fact, to save herself from the lust of Maxentius the tyrant. Adelhelmus, the Abbot of Malmesbury, calls them, *beatas virgines quæ sic, &c.* Sir Thomas More, in his Utopia, commends voluntary death if one be *sibi aut aliis molestus; especially if*

to live be a torment to him, let him free himself with his own hand from this tedious life, or from a prison, or suffer himself to be freed by others." However, be it said in justice to our worthy Burton, he condemns this practice as "a false and pagan position, founded in prophane stoical paradoxes and wicked examples;" and although he denounces most fulminating anathemas on papists, he concludes by saying, "we ought not to be rash and rigorous in our censures, as some are; Charity will judge and hope best; God be merciful unto us all!"

But why should we marvel at the credulity and superstition of our forefathers, when we daily observe equal absurdities? Fanaticism and bigotry will ever strive to speculate on human weakness, and endeavour to surround with impenetrable mists every rebel to their power who gropes for the shrine of reason and of truth. Johanna Southcote had her votaries, and Prince Hohenlohe is still considered by many a pious person as a vicarious instrument of divine mercy. No miraculous recovery recorded in the dark ages can surpass the tenebral absurdity of the following relation of one of his cures.

Miss O'Connor was a nun in a convent near Chelmsford, and in December 1820, being about thirty years old, was suddenly attacked by a violent pain in the right hand, which extended with much swelling and inflammation up the arm.

The whole limb became red, swollen, extremely painful, and entirely useless. Every remedy, both topical and directed to the system, was tried in vain for a year and a half. There was no suppuration, nor any formation of pus; but the malady continued obdurate, and yielded to no application. The resources of the flesh having manifestly failed, Mrs. Gerard, the worthy superior, very properly betook herself to those of the spirit. She made a request through a friend to Prince Hohenlohe to assist the patient in this her extreme case; when the following precious document, which it would be impious to translate into heretical English, was received :—

“ *Pour la Religieuse Novice d'Angleterre.*

“ Le trois du mois de Mai, à huit heures, je dirai, conformément à votre demande, pour votre guérison, mes prières. Joignez-y à la même heure, après avoir confessé et communiqué, les vôtres, avec cette ferveur angélique et cette confiance plénière que nous devons à notre Rédempteur J. C. : excitez au fond de votre cœur les vertus divines d'un vrai repentir, d'un amour Chrétien, d'une croyance sans bornes d'être exaucé, et d'une résolution inébranlable de mener une vie exemplaire, afin de vous maintenir en état de grace. Agréez l'assurance de ma considération.

“ PRINCE ALEXANDRE HOHENLOHE.

“ Bamberg, Mars 16, 1822.”

It is to be regretted that this letter, which was no doubt a circular to his proselytes, with necessary blanks to be filled up *pro re natâ*, as the doctors have it, was not drawn out in better French. Howbeit, on the appointed day, asserts Dr. Badely (the lady's unsuccessful medical attendant), Miss O'Connor went through the religious process prescribed by her princely physician. Mass being said, Miss O. not finding the immediate relief she expected from her faith, or faithfully expected, exclaimed somewhat impatiently, not having the fear of Job before her eyes, 'Thy will be done, O Lord, since thou hast not thought me worthy of this cure;' when behold! *immediately* after she felt an extraordinary sensation throughout the whole arm to the end of the fingers. The pains *instantly* left her, the swelling gradually subsided, and Dr. B., who no doubt was the pet physician of the nuns, declares that the hand shortly resumed its natural size and shape.

Now, Miss O'Connor was most likely a young lady from Ireland, where this miraculous cure was re-echoed in every chapel. The protestants were naturally offended by a report which seemed to impugn the sanctity of the reformed religion, and they thought it incumbent on them, for the welfare of church and state, to get up a miracle of their own which would cast Prince H., Nun O., and Dr. B. in the shade. The following statement was therefore published and certified upon

oath by sundry most respectable and most worthy Orangemen.

"I pledge you the word and honour of an Orangeman that the following facts, sworn to by all present, occurred yesterday evening. A party of gentlemen dined with me, and after dinner a vase, containing some orange lilies, was placed upon the table by my directions. We drank several toasts; but on the 'glorious and immortal memory' being given, an *unblown lily*, which the party had remarked, *expanded its leaves and bloomed before us* in all its splendour!" How appropriate are the lines of Otway when applied to the propagators of such absurdities, who dare to call upon our faith to give credence to their impostures.

" You want to lead

My reason blindfold like a hamper'd lion
Check'd of its noble vigour; then, when baited
Down to obedient tameness, make it crouch
And show strange tricks, which you call signs of faith:
So silly souls are gull'd, and you get money."

Not only did these victims of superstition firmly believe that evil spirits had the power of inflicting disease, and afterwards salve the mischief, but they were also invested with the privilege of killing and subsequently restoring to life. The story related of the truly learned Agrippa, who was falsely represented as a necromancer, is curious.

Agrippa had occasion one time to be absent for

a few days from his residence in Louvain. During his absence he entrusted his wife with the key of his museum, but with an earnest injunction that no one on any account should be allowed to enter it; Agrippa happened at that time to have a boarder in his house, a young fellow of insatiable curiosity, who constantly importuned his hostess, till at length he obtained from her the forbidden key. The first thing that attracted his attention was a book of spells and incantations. He spread the volume before him, and, thinking no harm, began to read aloud. He had not long continued this occupation, when a knock was heard at the door of the chamber. The youth took no notice, but continued reading. Presently there followed a second and a louder knock, which somewhat alarmed the reader. The space of a minute having elapsed, and no answer been made, the door opened and a demon entered. "For what purpose am I called?" said the unwelcome visitor in a stern voice: "What is it you demand to have done?" The youth was seized with the greatest alarm and struck speechless. The demon then rushed upon him, seized him by the throat, and strangled him, indignant no doubt in having been interrupted in some more interesting pursuit to no purpose.

At the expected time Agrippa came home, and to his great surprise found a number of devils capering about, and playing strange antics

on the roof of his house. By his art he caused them to desist from their gambols, of which he demanded the cause. The chief of them then related to him what he had done, how he had been disturbed and insulted, and how he had thought proper to revenge himself. Agrippa became much alarmed at the probable consequences of this unfortunate adventure, and he ordered the demon, without loss of time, to reanimate his victim, and walk about the streets with him, that the public might behold him alive. The infernal spirit reluctantly obeyed, and went forth with the student in the market-place and promenades. This excursion over, however, he maliciously allowed his companion to fall down, when life once more flitted from his body. For a time it was thought that the student had been killed by a sudden attack of illness, but, presently, the marks of strangulation became evident, and the truth came out. Agrippa was thus suddenly obliged to quit the town, and seek refuge in a distant state.

It was further related of this supposed wizard, that he was always accompanied by a familiar spirit in the shape of a black dog; and that when he lay on his death-bed he was earnestly exhorted to repent of his sins. Struck with remorse, he took hold of the dog, and removed from his neck a collar studded with cabalistic nails, exclaiming, "Begone, wretched animal, that has been the cause of my perdition!" and, lo! the dog imme-

diately ran away, and, plunging into the river Soane, disappeared. It is to be regretted that historians do not relate whether the water hissed or not when the canine devil took his last leap.

It merits notice, that the mystic and medicinal celebrity of various substances have to this hour survived the traditions of their superstitious origin; coral, for instance, which was considered as possessed of the power of keeping off evil spirits, and rendering effete the malefices of the evil eye, was constantly worn as an amulet; and Paracelsus informs us that it should be worn round the necks of infants, as an admirable preservative against fits, sorcery, charms, and poisons. We still find necklaces of this substance suspended by fond mothers and nurses round the necks of infants. In the West Indies these chaplets are worn by the negroes as a magic protection against Obiism, and they even affirm that the colour of the coral is affected by the state of health of the wearer, and becomes paler when he is ill.

The credulous belief in the mysterious powers of certain remedies, went so far in former days, that when they were applied to the weapon that had inflicted an injury, their indirect sympathetic action was considered as effectual as if they had been used to heal the wound. The sympathetic powder of Sir Kenelm Digby, which was nothing else but pulverized green vitriol, was eulogized in a discourse pronounced by its inventor, at Mont-

pellier, in 1658. Our James I. purchased this wonderful discovery from Sir Kenelm, who pretended that he had obtained it from a Carmelite friar, who had learned it in America and Persia. This superstitious practice is alluded to by Walter Scott, in the "Lay of the last Minstrel:"

"But she has ta'en the broken lance,
And wash'd it from the clotted gore,
And salved the splinter o'er and o'er."

Dryden has also illustrated this absurdity in his "Enchanted Island," where Ariel says,

"Anoint the sword which pierced him, with this
Weapon-salve, and wrap it close from air
Till I have time to visit it again."

Sir Kenelm's sympathetic powder was applied in the same manner; the weapon being covered with ointment and dressed three times a day. But it was not mentioned that at the same time the wound was to be brought together, and bound up with clean linen bandages for seven days. This wonderful cure was then simply the process of what surgeons call healing by first intention, which means uniting the lips of the wound without suppuration. Dr. Paris apprehends that this secret was suggested to the worthy knight by the cures operated by the rust of the spear of Telephus, which, according to Homer, healed the injuries it had occasioned; and this rust was most probably verdigris.

To this day the Irish peasantry, and even many

of the superior classes, firmly believe in the malevolent and destructive effect of the evil eye, when cast upon man or beast. Hence the absurd custom that prevails, especially in the western provinces, of adding "God bless it," to any expression of admiration; and if perchance a Sassenagh traveller exclaimed "What a sweet child!" or "What a fine cow!" without the adjunctive benediction, he would be suspected of malefice, and the priest forthwith summoned to save the devoted victim of sorcery. In Scotland dairy-maids drive cattle with a switch of the mountain ash, or roan-tree, considered as held sacred since the days of Druidism; and in some districts the sheep and lambs are made to pass through a hoop of its wood on the first day of May.

Regarding unlawful cures, have we not seen vaccination, when first introduced, condemned from the very pulpit as an impious interference in a disease which seemed to have been assigned to mankind by the Creator as an inevitable doom? Did not these desperate bigots even pronounce that we were not warranted to seek in the brute creation a human remedy or preservative? What is still more worthy of remark, is the coincidence of a similar idea in India, where the greatest obstacle vaccination encountered arose from a belief that the natural small-pox was a dispensation of a malicious deity, called, *Mah-ry-Umma*, or rather that the disease was an incarnation of

the goddess herself into the person who was affected by it : the fear of irritating her, and of exposing themselves to her resentment, necessarily rendered the natives averse to vaccination, until it was impressed upon their easy belief, that *Mah-ry-Umma* had altered her mind, and chosen this new and milder mode of manifesting her visits to her votaries.

Could there ever have existed a more superstitious belief than that which vested in the regal touch a healing power ? Yet from Edward the Confessor to the accession of the House of Hanover, it was generally thought in these realms that our kings could cure scrophula with their anointed fingers !

Dr. Paris's truly philosophic remarks on this subject in his valuable work, entitled *Pharmacologia*, are worthy of quotation :—"Credulity, although it is nearly allied to superstition, yet differs from it widely. Credulity is an unbounded belief in what is possible, although destitute of proof, and perhaps of probability ; but superstition is a belief in what is wholly repugnant to the laws of the physical and moral world. Credulity is a far greater source of error than superstition ; for the latter must be always more limited in its influence, and can exist only to any considerable extent in the most ignorant portions of society ; whereas the former diffuses itself through the minds of all classes, by which the rank and dignity of science

are degraded, its valuable labours confounded with the vain pretensions of empiricism, and ignorance is enabled to claim for itself the prescriptive right of delivering oracles, amidst all the triumph of truth and the progress of philosophy. Credulity has been justly defined *belief without reason*, while scepticism, its opposite, is *reason without belief*, and the natural and invariable consequence of credulity ; for it may be observed, that men who believe without reason are succeeded by others whom no reasoning can convince."

VOICE AND SPEECH.

BLUMENBACH has given us a most ingenious definition of this wonderful function. The voice, properly speaking, is a sound formed by means of expiration in the *larynx*, which is a most beautifully constructed organ, fixed upon the top of the windpipe, like a capital upon a column. It is composed of various cartilages, united in the form of a little box, and supplied with numerous muscles, that, moving altogether or separately, produce the variations of sound.

The part of the *larynx* most concerned in producing the voice is the *glottis*, or narrow opening of the windpipe, having the *epiglottis* suspended over it like a valve. The air expired from the lungs strikes upon the glottis, and thus becomes sonorous. The change that the glottis undergoes in the modulation of the voice has been matter of much controversy. Aristotle and Galen compared the glottis to a wind-instrument; Ferrein assimilated it to a chorded one. However, this latter hypothesis was objected to, on the principle that a chord, to vibrate, should not only be in a state of

tension but dryness ; characters which this organ does not possess, being constantly lubricated with mucus, and in a state of greater or lesser relaxation. Fulgentius considers the human voice to be composed of ten parts : the four first are the front teeth, so useful for the appulse of the tongue in forming sounds, without which a whistle would be produced instead of a voice ; the fifth and sixth are the lips, which he compares to cymbals striking against each other ; the seventh the tongue, which serves as a plectrum to articulate sounds ; the eighth is the palate, the concavity of which forms the belly of the instrument ; the ninth the throat, which performs the part of a flute ; and the tenth the lungs, which supply the place of bellows.

That every degree of action in the *glottis* is due to the muscles of the *larynx* is proved by the experiment of tying or dividing the recurrent nerves, when the voice is destroyed or weakened.

Speech is a peculiar modification of the voice adjusted to the formation of the sounds of letters, by the expiration of the air through the nostrils and mouth, and in a great measure by the assistance of the tongue applied and struck against the neighbouring parts, the palate and front teeth in particular, and by the diversified action of the lips. This is Payne Knight's doctrine, in his analytical essay on the Greek alphabet, and an illustration of the notions of Fulgentius.

Singing is compounded of speech and a musical

modulation of the voice, a prerogative peculiar to man even in his most savage state; for, despite the assertions of the visionary Rousseau, who maintained that it is not natural to our species, we find that even in the uncivilized regions of Ethiopia, Greenland, and Kamtschatka, singing is a solace and a comfort.

The mechanism of speech and articulation is so intricate, that even the division of letters and their distribution are attended with difficulties. The following is the division of Amman in his work, *Surdus Loquens*, published at Amsterdam in 1629, and enlarged under the title of *Dissert. de Loquela*, 1700, and is perhaps the most natural and intelligible.

He divides into, I. Vowels; II. Semi-vowels; III. Consonants.

I. The vowels are *simple*, *a*, *e*, *i*, *y*, *o*, *u*; and *mixed*, *ä*, *ö*, *ü*: these are formed by the *voice* only. The semi-vowels and consonants are articulated by the mechanism of *speech*.

II. The semi-vowels are *nasal*, *m*, *n*, *ng*, (*n* before *g*, which is nearly related to it,) that is, the labio-nasal *m*, the dente-nasal *n*, and the gutture-nasal *ng*; or *oral* (lingual), *r*, *l*, that is, *r* with a vibration of the tongue, or *l* with the tongue less moved.

III. The consonants he distinguishes into *sibilant* (pronounced in succession), *h*, *g*, *ch*, *s*, *sh*, *f*, *v*, *ph*, that is *h*, formed in the throat, as it were a mere aspiration; *g* and *ch*, true consonants; *s*, *sh*, pro-

duced between the teeth; and *f*, *v*, *ph*—formed by the application of the lower lip to the upper front teeth—and *explosive*, (which are as it were suddenly exploded by an expiration for a time suppressed or interrupted,) viz. *k*, *q*, formed in the throat; *d*, *t*, about the teeth; *p*, *b*, near the lips; and *double* (compound), *x*, *z*.*

It has been thought that the tongue was indispensable for the purposes of speech, yet there are instances on record in which this has not been found an invariable rule. Dr. Conyers Middleton mentions two cases of distinct articulation with at least little or no tongue. In his exposure of the *pious* deceptions of weak and wicked Christians during the first centuries of the Christian era, he notices a pretty tale of an Arian prince cutting out the tongues of some of the orthodox party, and these being as able to talk as before; nay, one of them, who had been dumb from his birth, gained the faculty of speech by losing his tongue! We find various accounts of persons who spoke more or less fluently without this organ. Jussieu has inserted in the *Mémoires de l'Académie des Sciences*, 1718, the case of a Portuguese girl, who instead of a tongue had merely a little protuberance of about four lines in diameter in the middle of her mouth, and endowed with the

* For the further illustration of this curious subject, Dr. Eliotson's valuable notes on Blumenbach may be consulted to advantage.

power of contraction and dilatation; she spoke distinctly, but experienced difficulty in pronouncing *c, f, g, l, n, r, s, t, x* and *z*, when she was obliged to bend her neck forward to upraise as it were the larynx. In this case deglutition could not be well performed, and she was obliged to use her finger to propel the masticated food downwards.

Dr. Eliotson observes, that it is by no means improbable that the progress of modern art may present us at some future period with mechanical substitutes for orators and preachers; for putting aside the magic heads of Albertus Magnus and Roger Bacon, Kratzenstein actually constructed an instrument to produce the vowels. De Kempelin has published a full account of his celebrated speaking machine, which perfectly imitated the human voice. The French celebrated mechanician, the Abbé Mical, also made two heads of brass which pronounced very distinctly entire phrases; these heads were colossal, and their voices powerful and sonorous. The French government refusing, it is said, in 1782, to purchase these automata, the unfortunate and too sensitive inventor, in a paroxysm of despair, destroyed these master-pieces of scientific ingenuity.

It has been observed that in various races the pronunciation seemed to depend upon some peculiar and characteristic conformation; and Adlung informs us that in the Hottentots the bony

palate is smaller, shorter, and less arched than in the other races, and that the tongue, especially in the Bosjesman tribe, is rounder, thicker, and shorter. Hence their pronunciation is singular, and has been compared to the clucking of the Turkey, or the harsh and broken noises produced by some other birds. They combine their aspirated gutturals with hard consonants without any intervening vowels, in a manner that Europeans cannot imitate.

No doubt the differences of language are as numerous as the other distinctions which characterize the several races of men. The various degrees of natural capacity and of intellectual progress; the prevalence of particular faculties; the nature of surrounding circumstances; the ease or difficulty with which our different wants and desires are gratified, will produce not only peculiar characters in the nature and construction of language, but in its copiousness and development.

One of the most curious points in the subject of language, is the continued existence in a large portion of Asia, very anciently civilized, and considerably advanced, at least in the useful arts, of simple monosyllabic languages, which are not in the slightest degree connected with the peculiar organization of the Mongolian variety, to which these people belong, and whose language is distinctly polysyllabic.

The attempts that have been made to trace the origin of languages to the varieties of our species, or to the influence of climate, have hitherto been fruitless, and the doctrines broached on the obscure subject refuted by observation. Mr. Jefferson states that there are twenty radical languages in America for one in Asia; more than twenty languages, he adds, are still spoken in the kingdom of Mexico, most of which are at least as different from one another as the Greek and the German, the French and the Polish. The variety of idioms spoken by the people of the new continent, and which without the least exaggeration may be stated at some hundreds, offer a very striking phenomenon, particularly when we compare it to the few languages spoken in Asia and in Europe. Vater also informs us, that in Mexico, where the causes producing insolation of the several tribes have been for a long time in a course of diminution, Clavigero recognized thirty-five different languages. Some of these words are rather of difficult pronunciation, and Humboldt tells us that *Notlazomahuiztespircatatzin* is the term of respect with which they addressed their priests. During the French revolution, a learned Jacobin discovered that the early Peruvians adored a divinity who patronized the *Sans-culottes* of their day, and who was named *Camaltze-quos*, i. e. without breeches. Such barbarous words do not constitute that engaging tongue that Shakspeare

calls "*speaking holiday*," but rather confirms Byron's ideas of the Russians' difficult expression, which no man has leisure to pronounce except on high-days and holidays.

Although brutes pronounce no articulate sounds, there is no doubt but they have a language perfectly intelligible to one another. Their manner of expressing their different emotions is in some instances perfectly distinct; and birds have most decidedly a peculiar language. The following may be said to be the words of a nightingale's strain observed by Bechstein, an ingenious ornithologist, and committed to paper several times while he listened with deep attention to that sweet bird's "complaining notes," that "tune our distresses and record our woes."

Tiouou, tiouou, tiouou tiouou
 Shpe tiou, tokoua
 Tio, tio, tio, tio.
 Kououtio, kououtio, kououtio, kououtio,
 Tskouo, tskouo, tskouo,
 Tsii, tsii, tsii, tsii, tsii, tsii, tsii, tsii tsii,
 Kouoror tiou. Tskoua pipitskousisi
 Tso, tso, tso, tso, tso, tso, tso, tso, tso, tso, tso, tsirrhading!
 Tsisi si tosi si, si, si, si, si, si, si.
 Tsorre tsorre tsorre tsorrehi
 Tsatn, tsatn, tsatn tsatn tsatn tsatn tsatn tsi,
 Dlo, dlo, dlo dla, dlo dlo dlo dlo dlo
 Kouioo trrrrrrrrtzt
 Lu, lu lu, ly ly ly li li li li
 Kouio didl li loulyli
 Ha guour, guour, koui kouio!
 Kouio, kououi kououi kououi koui, koui, koui, koui,

Ghi ghi ghi

Gholl, gholl, gholl gholl ghia hududoï

Koui koui koui ha dia dia dillhi !

Hets, hets, hets, hets, hets, hets, hets, hets, hets

Hets, hets hets hets hets

Tourrho hostehoï

Kouia, kouia, kouia, kouia, kouia kouia kouia kouiat !

A story is related of an irascible Irish piper of the name of *Molroy*, who declared a war implacable against the feline race, as he swore they invariably pronounced his name in their nocturnal concerts. Gall and various observers of animals have fully ascertained that the attention of dogs is awakened by our conversation. He brought one of these intelligent creatures with him from Vienna to Paris, which perfectly understood French and German, of which he satisfied himself by repeating before it whole sentences in both languages. A recent anecdote has been related of an old ship-dog, that leaped overboard and swam to the shore on hearing the captain exclaim, "Poor old Neptune! I fear we shall have to drown him!" and such was the horror which that threat inspired, that he never afterwards would approach the captain or any of the ship's company, to whom he had previously been fondly attached. It must, however, be observed that in the brute creation, as in ours (sometimes more brutal species), peculiar attributes, that do not belong to the race, distinguish individuals gifted with what in man we might call a superior intellect, but which in these

animals shows a superiority of what we term instinct. Spurzheim relates an instance of a cow belonging to Mr. Dupont de Nemours, which, amongst the whole kindred herd, was the only one that could open the gate leading to their pastures ; and her anxious comrades, when arriving at the wished-for spot, invariably lowed for their conductor. It is also related of a hound, who, unable to obtain a seat near the fire without the risk of quarrelling with the dozing occupants that crowded the hearth, was wont to run out into the court-yard barking an alarum that brought away his rivals in comfort, when he quietly re-entered the parlour, and selected an eligible stretching-place. This animal displayed as much ingenuity as the traveller who, according to the well-known story, ordered oysters for his horse for the purpose of clearing the fireside.

ECSTATIC EXALTATION.

THIS rapturous excitement is not unfrequently the province of the physician. Fortunately perhaps for the patient, it is an incurable malady, illustrating the lines of Dryden,

“There is a pleasure, sure, in being mad,
Which none but madmen know.”

If we admit this state of ecstasy to be a mental aberration, it is surely of an enviable nature, since it elevates the soul to a beatitude which is rarely the lot of man.

No definition of this state can equal that given by St. Theresa of her own feelings. By prayer she had attained what she calls a “celestial quietude,—a state of union, rapture, and ecstasy.” “I experienced,” she continues, “a sort of sleep of all the faculties of the soul—intellect, memory, and volition; during which, though they were but slumbering, they had no conception of their mode of operation. It was a voluptuous sensation, such as one might experience when expiring in raptures in the bosom of our God. The soul is unconscious of its actions; she (the soul) knows not if she speaks or if she remains silent,

if she laughs or if she cries. It is, in short, a blessed extravagance, a celestial madness, in which she attains in the knowledge of true wisdom an inconceivable consolation. She is on the point of merging into a state of languor, breathless, exhausted, the slightest motion, even of the hands, is unutterably difficult. The eyes are closed by a spontaneous movement; or, if they remain open, the power of vision has fled. In vain they endeavour to read: they can distinguish letters, but are unable to class them into words. Speak to a person in this absorbed condition, no answer will be obtained; although endeavouring to speak, utterance is impossible. Deprived of all external faculties, those of the soul are increased, to enjoy glorious raptures when conversing with the Deity and surrounding angels." These conversations the blessed St. Theresa relates; and she further states, that after having remained about an hour in this joyous trance, she recovered her usual senses, and found her eyes streaming in tears, as though they were weeping for the loss she had experienced in being restored to earthly relations.

Now, with all due deference to St. Theresa, this state was neither more nor less than a hysteric condition. Zimmerman relates two cases somewhat of a similar kind. Madame M. experienced effusions of divine love of a peculiar nature. She first fell into a state of ecstasy, motionless and in-

sensible, during which, she affirms, she felt this love penetrating her whole being, while a new life seemed to thrill through every fibre. Suddenly she started up, and seizing one of her companions, exclaimed, "Come, haste with me to follow and call Love, for I cannot sufficiently call upon his name!"—A French young lady was the second instance of this affection. She also frequently lost the power of speech and all external senses, animated with a love divine, spending whole nights in ecstatic bliss, and rapturously embraced by her mystic lover. It is difficult, perhaps, to separate this amorous feeling from physical temperament; and the following remarks of Virey on the subject of St. Theresa are most judicious:—"She possessed an ardent and sensitive disposition, transported, no doubt, by terrestrial affection, which she strove to exchange for a more exalted ardour for the Deity; for devotion and love are more or less of a similar character. Theresa was not fired by that adoration which is exclusively due to the infinite and invisible Intelligence which rules the universe; but she fancied a sensible, an anthropomorphous divinity; so much so, that she not unfrequently reproached herself with bitterness that these raptures were not sufficiently unconnected with corporeal pleasures and voluptuous feelings."

St. Theresa was not the only beatified enthusiast who suspected that the evil spirit occa-

sionally interfered in those ecstatic visions. St. Thomas Aquinas divides ecstasies into three classes;—the first arising from divine power, and enjoyed by the prophets, St. Paul, and various other saints. The second was the work of the devil, who bound down all external senses, suspended their action, and reduced the body to the condition of a corpse: such were the raptures in which magicians and sorcerers were frequently entranced, during which, according to Tertullian and other writers, the soul quitted the body to wander about the world, inquire into all its occurrences, and then returned with the intelligence it had obtained to its former abode. The third rapturous category of St. Thomas he simply attributes to physical causes, constituting mental alienation.

May not all these ecstatic raptures be considered as belonging to this third class? It has been observed that women, hysteric ones in particular, were the most subject to this supposed inspired affection; and amongst men it has also been remarked, that the enraptured individual was in general nervous, debilitated, and bald; and it is well known that the fall of the hair is frequently the result of moral and physical weakness, brought on by long studies, contemplation, grief, and illness, all of which may occasion mental aberration; for what other denomination can be given to the ecstatic state of the Monks of

Mount Athos, who pretended or fancied that they experienced celestial joys when gazing on their umbilics in converse with the Deity? Hence were they called *Omphalopsychians*, whose notions in the matter are thus described by Allatius:—
 “Elevate thy spirit above earthly concerns, press thy beard upon thy breast, turn thine eyes and all thy thoughts upon the middle of thine abdomen, hold thy breath, seek in thy bowels the abode of thy heart—then wilt thou find it unalloyed with dense and tenebral mists; persevere in this contemplation for days and nights, and thou shalt know uninterrupted joys, when thy spirit shall have found out thy heart and has illumined itself.” *

Bernier relates an act of supposed devotion amongst the Fakirs nearly as absurd, when, to seek the blessings of a new light, they rivet their

* The dream of Ertucules seems to have been connected with similar phantasies. “I dreamed, venerable sir,” said he to Edebales, “that the brightness of the moon did proceed from your bosom, and thence afterwards did pass into mine: when it was thither come, there sprung up a tree from my umbilic, which overshadowed at once many nations, mountains, and valleys. From the root of this tree there issued waters sufficient to irrigate vines and gardens; and then both my dream and my sleep forsook me.” Edebales after some pause thus answered: “There will be born unto you, my good friend, a son whose name shall be Osman; he shall wage many wars, and shall acquire victory and glory; and my daughter must be married to your son Osman, and she is the brightness which you saw come from my bosom into yours, and from both sprung up the tree.”—*Lips. Marsil.*

eyes in silent contemplation upon the ceiling; then gradually looking down, they fix both eyes gazing, or rather squinting, at the tip of their nose, until the aforesaid light beameth on them.

St. Augustin mentions a priest who could at will fall into one of these ecstasies, during which his external senses were so totally suppressed that he did not experience the pangs of the torture. Cardanus affirms that he was possessed of the same faculty. "*Quoties volo,*" he says, "*extra sensum quasi in exstasim transeo—sentio dùm eam in eo, ac (ut verius dicam) facio, juxta cor quandam separationem, quasi anima abscederet, totique corpori res hæc communicatur, quasi ostiolum quoddam aperiretur. Et initium hujus est à capite, maximè cerebello, diffunditurque per totam dorsi spinam, vi magnâ continetur; hocque solùm sentio, quòd sum extra meipsum: magnâque quâdam vi paululum me contineo.*"

There is no doubt that melancholy or intense cogitation may bring on this morbid condition. Zimmerman relates that the mathematician Viote was sometimes so wrapped up in calculation, that he was known to remain three days and nights without sleep or food: and Mendelsohn the philosopher, who was called the Plato of Germany, fell into a swoon the moment philosophy was talked of; and he was therefore ordered by his doctor not to think. Being asked one day what he contrived to do when not allowed

thought, he replied, "Why, I go to the window and count the tiles on the roof of the opposite house."

The celebrated physician Boerhaave was once engaged in so profound a meditation that he did not close his eyes for six weeks. Any fixity of idea may be considered as a monomania. Pascal, being thrown down on a bridge, fancied ever after that he was standing on the brink of a terrific precipice, which appeared to him an abyss ever ready to engulf him. So immutable was this dread, that when his friends conversed with him they were obliged to conceal this ideal peril with a chair, on which they seated themselves, to tranquillize his perturbed mind. This is an instance of a painful fixity of thought, the result of which is melancholic mania; whereas ecstatic exaltation is the enjoyment of a delicious sensation unknown in our habitual earthly enjoyments, and beautifully expressed by Shakspeare, when Pericles thus addresses Helicanus,—

O Helicanus! strike me, honoured sir;
Give me a gash,—put me to present pain,
Lest this great sea of joy, rushing upon me,
O'erbear the shores of my mortality,
And drown me with their sweetness.

VARIETIES OF MANKIND.

THE most approved classification of mankind is that of Blumenbach. He divides them into five varieties: 1. The Caucasian; 2. Mongolian; 3. Ethiopian; 4. American; and 5. Malay: and the following are the characteristics of each.

I. THE CAUCASIAN.

The skin white; the cheeks rosy—almost a peculiarity of this variety; the hair of a nut-brown, running on the one hand to yellow, on the other into black, soft, long, and undulating; the head symmetrical, rather globular; the forehead moderately expanded; the cheek-bones narrow, not prominent; the alveolar edge round, the front teeth of each jaw placed perpendicularly. The face oval and pretty straight; its features moderately distinct; the nose narrow and slightly aquiline, the bridge of it rather prominent: the mouth small; the lips, especially the lower, gently turned out; the chin full and round. This variety comprehends all Europeans, except the Laplander and the rest of the Finnish race; the Western Asiatics as far as the Obi, the Caspian, and the Ganges; and the people of the North of Africa.

II. THE MONGOLIAN.

Skin of an olive colour; the hair black, stiff, straight, and sparing. The head almost square, the cheek-bones prominent outwards; the superciliary arches scarcely perceptible; the osseous nostrils narrow; the alveolar edge arched obtusely forward; the chin somewhat projecting. The face broad and flattened, and its parts consequently less distinct; the space between the eyebrows very broad as well as flat, the cheeks not only projecting outward, but nearly globular; the aperture of the eye-lids narrow and linear; the nose small and flat.

This comprehends the remaining Asiatics, except the Malays of the extremity of the Transgangeitic Peninsula, the Finnish races of the North of Europe, Laplanders, &c. and the Esquimaux diffused over the most northern parts of America, from Behring's Strait to the farthest habitable point of Greenland.

III. THE ETHIOPIAN.

Skin black; the hair black and crisp. Head narrow, compressed laterally; forehead arched; the cheek-bones projecting; the osseous nostrils large, the jaws lengthened forward; the alveolar edge narrow, elongated, more elliptical; the upper front teeth obliquely prominent, the lower jaw large and strong; the skull thick and heavy; the

face narrow, and projecting at its lower part ; the eyes prominent ; the nose thick and confused with the projecting cheeks ; the lips, especially the upper, thick ; the chin somewhat receding ; the legs in many instances bowed.

This comprehends the inhabitants of Africa, with the exception of the Caucasian variety which inhabits the northern parts.

IV. THE AMERICAN.

Skin of a copper colour ; hair black, stiff, straight, and sparing. Forehead short ; cheek-bones broad, but more arched and rounded than in the Mongolian variety ; the orbits generally deep ; the forehead and vertex frequently deformed by art ; cranium usually light. The face broad, with prominent cheeks, not flattened, but with every part distinctly marked if viewed in profile ; the eyes deep ; the nose rather flat, but still prominent.

This comprehends all the Americans excepting the Esquimaux.

V. THE MALAY.

Skin tawny ; hair black, soft, curled, thick, and abundant ; head rather narrow ; forehead slightly arched ; cheek-bones not prominent, upper jaw rather projecting. Face prominent at its lower part ; the features viewed in profile more distinct ; the nose full, broad, bottled at its point ; mouth large.

This comprehends the inhabitants of the Pacific Ocean, of the Marian, Philippine, Molucca, and Sunda isles, and of the Peninsula of Malacca.

The Caucasian variety derives its name from *Mount Caucasus*, where we meet with a beautiful race—the Georgians; and because, so far as the imperfect light of history and tradition can guide us, the original abode of the species appears to have been in that quarter. In this class are included all the ancient and modern Europeans; the Assyrians, Medes, Chaldeans, Sarmatians, Scythians, and Parthians; the Philistines, Phœnicians, Jews; the Turks, Persians, Arabians, and Hindoos of high caste. Blumenbach is inclined to believe that the primitive human race belonged to this variety. In support of this opinion it may be stated, that the part of Asia which seems to have been the cradle of the race has always been, and still is, inhabited by tribes of this formation; and the inhabitants of Europe in great part may be traced back for their origin to the West of Asia.

Are all these various tribes brethren descended from one stock? or must we trace them to more than one? The physiologists who have ventured to express the latter opinion have been stigmatized by intolerance and blind bigotry as atheists and unbelievers; yet this question belongs to the domain of the naturalist, and the philosopher has

an unqualified right to moot it without incurring the heinous charge of infidelity. To form an opinion on this difficult subject, it will be necessary, as Lawrence justly observes, to ascertain carefully all the differences that exist between the various races of men; to compare them with the diversities observed among animals; to apply to them all the light which human and comparative physiology can supply, and to draw our inferences concerning their nature and causes from all the direct information and all the analogies which these considerations may unfold. "It is quite clear," continues the same ingenious writer, "that the Mosaic account makes all the inhabitants of the world descended from *Adam* and *Eve*. The entire, or even the partial inspiration of the various writings comprehended in the Old Testament, has been and is doubted by many persons, including learned divines and distinguished Oriental and Biblical scholars. The account of the creation, and subsequent events, has the allegorical figurative character common to Eastern compositions, and it is distinguished amongst the cosmogonies by a simple grandeur and natural sublimity, as the rest of these writings are by appropriate beauties in their respective parts. The representation of all the animals being brought before Adam in the first instance, and subsequently of their all being collected in the ark, if we are to understand them as applied to the living inha-

bitants of the whole world, is zoologically impossible. How could the polar bear have traversed the torrid zone? If we are to believe that the original creation comprehended only a male and female of each species, or that one pair only was saved from an universal deluge, the difficulties are increased: the carnivorous animals must have perished with hunger, or destroyed most of the other species." On this obscure subject Adeling has expressed himself with much ingenuity: "Asia has been at all times regarded as the country where the human race had its beginning, and from which its increase was spread over the rest of the globe. Tracing the people up to tribes, and the tribes to families, we are conducted at last, if not by history, at least by the tradition of all old people, to a single pair, from which tribes and nations have been successively produced. What was the first family, and the first people descended from it?—where was it settled?—and how was it extended so as to fill the four large divisions of the globe? It is a question of fact, and must be answered by History. But History is silent: her first books have been destroyed by time; and the few lines preserved by *Moses* are rather calculated to excite than to satisfy our curiosity.

"We must fancy to ourselves this first tribe endowed with all human faculties, but not possessing all knowledge and experience, the subsequent acquisition of which is left to the natural ope-

ration of time and circumstances. As Nature would not unnecessarily expose her first-born and inexperienced son to conflicts and dangers, the place of his early abode would be so selected that all his wants could be easily satisfied, and every thing essential to his existence be readily procured. He would be placed, in short, in a garden or paradise. Such a country is found in central Asia, between the 30th and 50th degrees of north latitude, and the 90th and 110th of east longitude (from Ferro); a spot which, in respect to its height, can only be compared to the lofty plains of Quito in South America. Here, too, all the animals are found wild, which man has tamed for his use, and carried with him over the whole earth."

This ingenious historical investigation points out the east as the earliest and original seat of our species, the source of our domesticated animals and of our principal vegetable food; but it by no means decides whether the globe was peopled by one or several original stocks.

The startling nature of this question on the first view of the subject must induce us to consider the circumstance of these five distinct varieties arising from one stock as miraculous; but when we compare them with the corresponding difference in animals, we can easily come to the conclusion that the various races of human beings are only to be regarded as varieties of a single

species, without supposing the intervention of any supernatural agency.

The sceptic Voltaire, who evinced more wit than learning in his endeavours to invalidate Scriptural tradition by ridicule, thus expresses himself: "Il n'est permis qu'à un aveugle de douter que les blancs, les nègres, les albinos, les Hottentots, les Lapons, les Chinois, les Américains, soient des races entièrement différentes;" but had this philosopher been better versed in zoology and physiology, he would not have made so groundless an assertion. "Analogical and direct facts," says Dr. Elliotson, "lead to the conclusion that none of the differences among mankind are so great as to require the belief of their originality." A contrary opinion, however, should not be stigmatised by bigotry, for Locke has justly observed that only matters above human reason are the proper subjects of revelation; and Bacon has also maintained that religious and philosophical inquiries should be kept separate, and not pompously united. Dr. Bostock, than whom no man could be less sceptical, plainly admits we do not find that the writer of the book of Genesis lays claim to any supernatural source of information with respect to natural phenomena, while the whole tenor of his work seems to show that on such topics he adopted the opinions which were current among his contemporaries.

The causes of the difference of our species have

been the subject of as great a discrepance in opinion. All the Greek and Roman historians have attributed it to the influence of climate; and amongst the moderns, Montaigne, Montesquieu, Buffon, and Zimmerman, have considered the modification of the individual and the degeneration of the offspring as the result of this external agency. Lord Kaimes, Hume, and many other philosophers, have entertained a contrary opinion. No doubt, the influence of climate may materially affect colour, stature, hair, features, and even the moral and intellectual character; but it must be considered as inadequate to act upon conformation. The prevalence of light colours in the animals of polar regions is well known: the arctic fox, the white bear, the snow-bunting, are striking instances of this peculiarity; but these circumstances are purely superficial. The skulls of these individuals are similar to those of the Europeans; nay, it is well known that light races are found among dark nations, and many protected parts of the body are blacker than those which are exposed. Buchanan tells us, that the Jews in Cochinchina are divided into white and black classes, though born under the same parallel; the white Jews having been known there for upwards of one thousand seven hundred years. Dr. Shaw and Bruce describe a race of fair people, near Mount Aurasius in Africa, with red hair and blue eyes, and who are, according to tradition, descended

from the Vandals. We find the red Peruvian, the brown Malay, and the white Abyssinian in the very zones peopled by jet-black races. This influence of temperature upon colour frequently varies according to the seasons. Pallas observed that even in domestic animals, such as the horse and cow, the coat is of a lighter colour in winter. The Siberian roe, red in summer, is white in the winter; the fur of the sable and the martin is much deeper in the warm months; and the squirrel and *mustela nivalis*, which become white in Siberia and Russia, do not change their hue in Germany. The winter coat, it has been observed by naturalists, is found far advanced in the preparatory autumn. This bounteous provision of nature seems to have been extended to the vegetable kingdom, and it has been observed that the pellicle of onions is much thicker on the approach of a severe winter than on that of a more temperate season. But if further proof were necessary to impugn this doctrine respecting climate, we may adduce the fact of a woman having born twins of different complexions, a white and a black. With all due respect to the much lamented Bishop Heber, we must receive with some degree of hesitation his assertion that the Persian, Greek, Tartar, and Arabian inhabitants of India, assume, in a few generations, without any intercourse with the Hindoos, a deep blue tint, little lighter than that of a negro; and that the Portuguese, dur-

ing three hundred years' residence in that climate, have assumed the blackness of a Kaffer. The same learned prelate is of opinion that our European complexion was not primitive, but rather that of the Indian; an intermediate tint is perhaps the most agreeable to the eye and instinct of the majority of the human race. Dr. Heber, perhaps, had not seen, in various Roman catholic treasures, portraits of the Virgin Mary, painted, according to tradition, by St. Luke, and in which she is represented as a negress.

That solar heat produces blackness of the integuments is an ancient opinion, and is illustrated by Pliny, who tells us, "*Æthiopes vicini sideris vapore torrerī, adustisque similes gigni, barba et capillo vibrato, non est dubium.*" Buffon asserts that "climate may be regarded as the chief cause of the different colours of man;" and Smith is of opinion "that from the pole to the equator we observe a gradation in the complexion nearly in proportion to the latitude of the country."

Blumenbach, under the same impression, endeavours to account for this black tinge by a chemical illustration somewhat curious. He states that the proximate cause of the dark colour is an abundance of carbon secreted by the skin with hydrogen, precipitated and fixed by the contact of the atmospheric oxygen. Our creoles, and the British inhabitants of India, may esteem themselves particularly fortunate in not being subject to this chemical operation!

On the other hand, it is well known that a black state of the skin has been produced in white races under peculiar circumstances; and Le Cat and Camper mention cases of women who turned dark during their pregnancy. It would be idle to dwell further on the hypothetic illustrations regarding this supposed operation of climate, which the observation of every unprejudiced traveller can impugn.

Migration to other countries has also been adduced as one of the causes of variety in mankind; but the permanency of the characteristic distinctions of any race militates against this supposition. The physical character of the Celts, who peopled the west of Europe at an early period, is still observable in the Spaniard, most of the French, the native Welsh, the Manks, and the Scotch Highlander; whereas the German race, who occupied the more northern and eastern settlements, are still distinguished by their transparent skin, rosy complexion, flaxen hair, and blue eyes; and in Ireland, the race of the Danes and the Milesians can to this day be recognised in their respective characters. Shaw and Bruce traced the descendants of the Vandals who passed from Spain into Africa in the fifth century; and, after a lapse of thirteen centuries, Bruce says that they are "fair like the English, their hair red, and their eyes blue." Negroes have been introduced into the New World for upwards of three centuries, where, despite of

a new clime and different habits, they still retain the character of their race ; and the Jews who have not intermarried out of their nation, have preserved their features for nineteen centuries.

Not only do we observe the peculiarities of physical conformation resisting the destructive or degenerating hand of time, but certain imperfections in their faculties have been equally permanent in certain tribes. It is a curious fact that the Mamelukes, who have resided in Egypt for upwards of five hundred and fifty years, have never perpetuated their subsisting issue. Volney observed, that there does not exist one single family of them in the second generation ; all their children perishing in the first or second descent. The same observation applies to the Turks, who can only secure the continuance of their families by marrying native women, an union which the Mamelukes disdained. This singularity, remarked by Volney, has been since confirmed by late travellers.

It will be found that the progress of domestication, the natural result of civilized improvement, tends more materially to operate a wonderful change in the animal conformation, than any other supposed agency. The head of the domestic pig differs as much from that of the wild one as the Negro from the Caucasian. At Padua, it has been observed that fowls have a cranium perforated by numerous holes, and hol-

lowed out like a shell. In some countries, nay districts, cattle and sheep have or have not horns ; and in other instances sheep have so many of them as to have acquired the epithet of *polyce-
rateous*. Wild animals continuing to inhabit the place that bore them, undergo little or no change, and their fossil remains and skeletons are similar to the present species ; but nothing can form a stronger contrast to this specific uniformity than the numerous varieties to be found in those races that have been crossed in breed and domesticated by man. We could scarcely imagine that our sheep owe their origin to the mouflon or argali, (*ovis ammon*,) an animal large in size, fleet, and fierce. The sheep of Senegal and India are those that have undergone the least degradation ; while those of Barbary, Egypt, Arabia, and Persia, have experienced greater degeneration. We daily see dogs degenerate before our eyes, and it has not yet been satisfactorily ascertained whether they arise from one or several species. Cuvier, in his diligent researches, has concluded that our oxen do not originate in the urus or bison of the ancients, formerly found in various parts of Europe, and still met with in the forests of Lithuania, and on the Carpathian and Caucasian chains ; but he is of opinion, from the examination of fossil remains, that, like the camel and the dromedary, the species has been destroyed by civilisation : the causes of these changes do not appear to ope-

rate by altering the parents, but by disposing them to produce offsprings more or less dissimilar in colour, form, and disposition.

Dr. Prichard observes, that the negro slaves of the third and fourth generation differ materially from the natives of Africa.

In opposition to this doctrine, which admits this wonderful degeneration under the plastic influence of domestication, it has been shown that, as far as we know, the lapse of ages has not produced any change in the generality of animals. The zoological descriptions given by Aristotle twenty-two centuries ago apply distinctly to the same species of the present day, and every work of art in which these animals are represented corroborates the fact. Geoffroy de St. Hilaire brought numerous mummies of animals from the sepulchres of Egypt, and found no more difference between their skeletons and the osseous conformation of the present races, than in the relics of the human mummy and the bones of our contemporaries.

The following luminous conclusion of Lawrence illustrates the application of the foregoing fact: "If new characters are produced in the domestic animals because they have been taken from their primitive condition, and exposed to the operation of many, to them, unnatural causes,—if the pig is remarkable among these for the number and degrees of his varieties, because it

has been the most exposed to causes of degeneration,—we shall be at no loss to account for the diversities in man, who is, in the true, though not in the ordinary sense of the word, more of a domesticated animal than any other. We know the wild state of most of them, but we are ignorant of the natural wild condition to which man was destined. Probably there is no such state; because Nature having limited him in no respect,—having fitted him for every kind of life, every climate, and every variety of food,—has given him the whole earth for his abode, and both the organized kingdoms for his nourishment. Yet in the wide range through which the scale of human cultivation extends, we may observe a contrast between the two extremities, analogous to that which is seen in the wild and tamed races of animals. The savage may be compared to the former, which range the earth uncontrolled by man; civilized people to the domesticated breeds of the same species, whose diversities of form and colour are endless.”

It is therefore obvious that the various causes which operate upon animals in producing these alterations from the primitive race, although the manner in which they act is unknown, are sufficiently evident to convince us, by analogy, that they may account for similar phenomena in the human race, without the gratuitous assumption of different original species, tending to invalidate the

Mosaic account of the creation. Despite the witticisms of Voltaire and other philosophers on this subject, sound philosophy teaches us to assign the same causes to the same effects without calling in the adventitious aid of other possible influences; and no difficulties prevent us from recognising the unity of the human species, which are not applicable to all other animals.

ON THE INHUMATION OF THE DEAD IN CITIES.

FROM time immemorial, medical men have strongly pointed out to municipal authorities the dangers that arise from burying the dead within the precincts of cities or populous towns. Impressed with the same conviction, ancient legislators only allowed to the most illustrious citizens a sepulchre in the temples of the gods. Euclides was interred in the temple of Diana Euclis, as a reward for his pious journey to Delphi in search of the sacred fire; the Magnesians erected a monument to Themistocles in their forum; Euphron received the same honour in Corinth; and Medea buried her two sons, Mermerus and Pheres, under the protection of Juno Acræa's altars, to guard their ashes from their persecutors. Lycurgus was perhaps the only Grecian legislator who recommended inhumation in temples and in cities, to accustom youth to the daily spectacle of death.

The primitive Grecians, it appears, buried their dead in or about their dwellings; and we find a law amongst the Thebans, ordaining that every

person who built a house should provide a repository for the dead upon his premises. In latter days, both Grecians and Romans erected their tombs outside of their cities, and chiefly by the road-side.

Both religious and civil motives might have dictated the propriety of this regulation. The traveller, setting out upon a journey, and passing by the sepulchres of his sires, could in the presence of their manes invoke their protection; and on his return to his penates, safe from danger, he could put up thanks to the gods for his preservation. As a prudential measure, the interment of the dead beyond the walls of their towns prevented the fatal consequences that might have arisen from extensive putrefaction and infection, and moreover the burning of bodies would have exposed the adjoining buildings to the danger of frequent fires. It is also possible that policy dictated these sanitary enactments. The ancients held the remains of the departed as a sacred trust, in the defence of which they were ever prepared to fall; and it is not improbable that their warriors would have rushed forth to meet the invader, before he would have defiled, by his approach to their cities, the ashes of their ancestors. So scrupulously religious were the Athenians in performing the funeral rites of the dead, that they put to death ten of their commanders, after the battle of Arginusæ, for not having committed

to the earth the dead bodies that floated on the waters.

There is no doubt but that their dead were buried in such a manner as not to prove injurious to the survivors; and Seneca plainly says, "*Non defunctorum causâ, sed vivorum, inventa est sepultura.*" The ancients both burned and buried their dead, but inhumation appears to have been the most early and the most approved rite. "Let the dead be buried," says a law of Cecrops. Solon justifies the claims of the Athenians to the island of Salamis, from the circumstance of the dead bodies interred on its shores having been inhumed according to the Athenian custom, with their feet turned to the west, whereas the Megarensians turned theirs to the east.

In various instances the burial or the burning appear to have been adopted upon philosophical doctrines. Democritus, with a view to facilitate resurrection, recommended interment, and Pliny thus ridicules the intention: "*Similis et de asservandis corporibus hominum, et reviviscendis promissa à Democrito vanitas, qui non revivixit ipse.*" Heraclitus, who considered fire as the first principle, advocated the funereal pile; while Thales, who deemed water the chief element, urged the propriety of committing the departed to the damp bosom of the earth.

The early Christians inhumed the bodies of their martyrs in their temples. This honour was

afterwards conferred on the remains of distinguished citizens, illustrious prelates, and princes. The infectious diseases which at various periods arose from this custom, induced Theodosius, in his celebrated code, strictly to prohibit it; and he even ordered that the remains of the dead thus inhumed should be removed out of Rome. The vanity of man, and the cupidity of the priesthood, soon over-ruled these wise regulations. Every family possessing sufficient means, claimed a vault within the churches, and thereby the revenues of the clergy were materially increased. At all times, even the dead appeared to have shared with the living the obligation of supporting the ministers of the altar. By a law of Hippias, the priestesses of Minerva received a *choenix** of wheat, and one of barley, with an obolus, for every individual who departed this life. The *libitinarii* of the Romans fulfilled the duties of our undertakers, or rather of the directors of funeral pomp of the French; yet they were attached to the temple of the goddess Libitina, whose priests received a fee in silver for every one who died, under the name of *Libitinæ ratio*. Suetonius informs us, that in Nero's time the mortality was so great during one autumn, that thirty thousand of these silver pieces were deposited in the fatal treasury. To increase the emoluments of this sacerdotal body, these *libitinarii* sold at high prices everything that was requisite for the funeral ceremonies,

* The *choenix* contained a pint.

received a toll at the city gate through which the bodies were carried out, as well as at the entrance of the amphitheatre through which the dead gladiators were borne away. Phædrus alludes to this speculation in one of his fables, when speaking of a miser,

“ Qui circumcidis omnem impensam funeris,

“ Libitina ne quid de tuo faciat lucrum.

It is supposed that this avaricious divinity owed her name to the displeasure which it must have occasioned to all who heard it,—*quòd nemini libeat* ; but it is also possible that it was derived from her bearing poor mortals away, whenever she fancied it, and *ad libitum*.

In more modern times, Theodolphus, Bishop of Orleans, complained to Charlemagne that lucre and vanity had converted churches into charnel-houses, disgraceful to the clergy and perilous to the community. It was upon this representation that this prince, in his capitularies, prohibited burials in churches under heavy penalties. But the laws of the wisest could not prevent priesthood from considering this source of emolument, although endangering public salubrity, an indisputable property that could not be meddled with without endangering the church.

In France, Maret in 1773, and Vicq d'Azyr in 1778, pointed out the danger of this practice in such glaring colours, that government by an edict only allowed church interment to certain

dignitaries; but in 1804, by a wise law that should be enforced in every civilized country, inhumation in cities was entirely abolished: amongst the numerous well-authenticated evil results of burying in churches that led to this wise prohibition, the following were the most striking and circumstantial.

In 1773, in Saulieu, Burgundy, an epidemic disease arising from the inhumation of a corpse in the church of St. Saturnin created considerable alarm. The body of a corpulent person had been interred on the 3rd of March, and a woman was buried near it on the 20th of April following: both had died of a reigning fever. During the last burial a foetid effluvia arose from the vault, which pervaded the whole church; and, out of one hundred and seventy persons who were present, one hundred and forty-nine were attacked with the prevailing malady, although its progress had been arrested amongst the other inhabitants of the town.

In 1774, a similar accident occurred in a village near Nantes, where several coffins were removed in a vault, to make room for the lord of the manor: fifteen of the by-standers died from the emanation.

In 1744, one third of the inhabitants of Lectouse perished from a fever of a malignant character that manifested itself after some works that required the removal of a burial-ground. Two

destructive epidemics swept away large proportions of the population of Riom and Ambert, two towns in Auvergne.

Taking this matter under consideration in a moral, or even a religious light, it may be questioned whether any advantage can accrue from the continuance of this pernicious custom, which during the prevalence of epidemic diseases endangers the life of every person who resides near a church. Does it add to the respect which the remains of the dead are entitled to? Certainly not: the constant tolling of "the sullen bell"—the daily cortège of death that passes before us—the graves that we hourly contemplate, perusing monumental records which more frequently excite unseasonable laughter than serious reflection—everything, in short, tends to make death of little or no moment, except to those who have heard the *mutes* gossiping at their door. So accustomed, indeed, are we from our childhood to sepulchral scenes, that, were it not for the parish-officers, our church-yards would become the playground of every truant urchin; and how often do we behold human bones become sportive baubles in the wanton pranks of the idlers, who group around the grave-digger's preparations! So callous are we to all feelings of religious awe when surrounded with the dead, that our cemeteries are not unfrequently made the rendezvous of licentiousness and the assembly-ground of

crime, where thieves cast lots upon a tomb for the division of their spoil.

With what different feelings does the traveller wander over the cemetery of *Père la Chaise*! I am well aware that many of the gewgaw attributes that there decorate the grave, have been called the "*frippery*," "*the foppery*" of grief; but does there exist a generous, a noble sentiment, that may not be perverted by interested motives and hypocrisy into contemptible professions? how often is the sublime rendered ridiculous by bad taste and hyperbolic affectation! When we behold the fond lover pressing to his lips a lock of hair, or the portrait of all that he holds dear, the cold calculating egotist may call this the *frippery of love*; but the stoic who thinks thus, has never known the "sweet pangs" of requited affection, when, in bitter absence, the recollection of bliss gone by embodies in our imagination the form we once pressed to our respondent heart. The creation of our busy fancy stands before us, gazing on us with that tender look that in happier days greeted the hour of meeting; or trembles in our tears as when we last parted—to meet perhaps, no more! With what fervour of religious love do we behold the simple girl kneeling with uplift eye and hand on the green sod that covers all that endeared her to existence, till, overwhelmed with burning, choking regrets—as idle as they are uncontrollable—she sinks prostrate

on the cold earth that now shrouds that bosom which once nestled her young hopes and fears! There have I seen the pale, the haggard youth,—to all appearances a student,—seated mournfully by the side of a tomb, absorbed in deep thought, heedless of the idlers who passed by him, looking at him perhaps with contempt!—heedless of the swift flight of time, which shrouded him imperceptibly in darkness, until he was warned by the guardian of the dead that it was time to depart—and to depart *alone*! No inscription recorded the “one loved name:” he would not expose it to the unfeeling gaze of the heartless tourist: all he would willingly have traced upon her tomb, would have been “Here lies *my own*!”

The mouldering earth, the fleshless skeleton over which he mourns, cannot obliterate the remembrance of what she was: though her eyes perhaps no longer exist, still their former languid, liquid look of bliss, beams freshly in his recollection. The lips which once pronounced the long wished-for avowal of mutual love are still moist and open to memory’s embrace—still seem to lisp the delicious *tu*! Our language is rich, without comparison richer far than the French; but we have nothing so endearing, so bewitching, as their *tu-toiement*: our *thee*’s and *thou*’s are frigid, chilly, when compared to the *first toi* that escapes inadvertently from beloved lips! A French writer has beautifully expressed this exquisite

moment: “ *Le premier tu est tout-puissant ; c’est le fiat lux de l’âme ; il est sublime, il débrouille le chaos !*”

Sublime are the words, “Blessed are the dead who die in the Lord!” Would it be irreligious to say, “Happy are the dead who die beloved?” Their fond and ardent heart had never been chilled by the withering hand of infidelity and ingratitude. They died in an ecstatic dream of perfect bliss on earth, and never were awakened to the world’s mocking realities!—they died when they felt and believed in their heart of hearts that they were dearly beloved—could not be loved more dearly: with that conviction, death, in a worldly acceptance, can never be untimely. Probably, they died still sufficiently animated by a latent, lingering spark of life, to press the hand that was so often linked in mutual pressure in happy days—to feel the burning tear of anguish drop on the pale cheek—to hear the sad, the awful, last word, *à Dieu!*—an expression that habit has rendered trivial, but which bears with it, in the tenderest solicitude, the most hallowed meaning; since, in pronouncing it, we leave all that we cherish under the protection and the safeguard of OUR GOD.

Affection deprives death of all horrors. We shrink not from the remains of what we cherished. Despite its impiety, there was something refined in that conviction of the ancients, who imagined that in bestowing their farewell kiss they inhaled

the souls of those they loved. How sweet are those lines of Macrobius, originally attributed to Plato!

“Dum semihulco suavio
Meum pullum suavior,
Dulcemque florem spiritus
Duco ex aperto tramite,
Animo tunc ægra et saucia
Cucurrit ad labia mihi!”

Our Shakspeare has quaintly, yet beautifully, described this parting embrace :

“And lips, O you
The doors of breath, seal with a righteous kiss
A dateless bargain to engrossing death.”

Nor was it only on the dying that the ancients bestowed this mark of fondness: Tibullus and Propertius tell us, that, as their bodies were laid on the funeral pile, they clasped them in a fond and last embrace.

In regard to the painted crosses, the chaplets, the garlands of flowers, which mark the hallowed resting-place of the departed, it may be said that they are but romantic and poetical expressions of grief. If it were only real grief that expressed itself by outward testimonials, how soon would mourning be banished as an idle expense!—the “inky cloak,” and customary “suits of solemn black—the trappings and the suit of woes,” be laid aside! What a different feeling does the splendid catafalque, covered with black velvet, studded with silver tears, and illumined by thousands of glaring tapers, excite, when compared with the simple

and verdant graves which point out the spot "where souls do couch in flowers," blessed by affection's tears instead of lustral waters. At all periods, amongst every nation, flowers and certain trees seem to have been consecrated to the dead. The Romans planted the wild vine and the box around their tombs. Thus Martial to Alcimenes :

"Accipe, non Phario nutantia pondera saxo,
Quæ cineri vanus dat ruitura labor,
Sed fragiles buxos, et opacas palmitis umbras,
Quæque virent lacrymis humida prata meis."

The wealthy assigned a beauteous garden to their departed favourites, as in the instance of Augustus and Mæcenæ. Not only did they suspend garlands over their tombs, but scattered flowers around them. Again in Virgil,

"Purpureosque jacit flores, ac talia fatur."

The same custom prevailed amongst the Grecians, who considered all purple and white flowers acceptable to the dead. The Thessalians strewed Achilles' grave with the immortal amaranth and lilies. Electra complains that the tomb of Agamemnon received no myrtle boughs; in short, instances of this practice are everywhere to be found. In addition to flowers and perfumes, ribands and hair were also deposited on their sepulchres. Electra adorns Agamemnon's tomb with her locks, and Canace laments that she had not been able to perform the same rite on her

beloved Macareus. Poets tell us that precious ointments and wines were poured upon their monuments; and we find, in Euripides, Helen bidding Hermione to take locks of her hair, honey mixed with milk, and wine, to the sepulchre of her aunt. Amongst the Chinese, to the present day, the cypress and the fir shade their cemeteries: the former tree, an attribute of Pluto, was ever considered funereal, hence called *feralis*; and the *feralia* were festivals in honour of the dead, observed by the Romans. Varro pretends that the cypress was called funereal from *funus*, as it emitted an antiseptic aroma. Pliny and others pretend that it typified the dead, from its never shooting out fresh sprouts when the trunk was hewn down. At any rate, to this hour, it is planted in burying-grounds in every civilized country.

Let us then hope, both for the living and the dead, that this custom, which obtains in France and other countries, will be adopted by us, instead of becoming the subject of ridicule. It is far more desirable to see families repairing to the tomb of the departed on the anniversary of their death, than to behold them daily passing by their remains with cold indifference.

It would scarcely be believed upon the continent of Europe, that to this very hour bodies are buried in confined church-yards in the most crowded and dirty parts of the British metropolis, such as Rus-

sel-court, Drury-lane, and various other similar holes and corners; the rudest nations were never guilty of such a glaring impropriety. In the kingdom of Siam, the remains of the opulent are burnt with great ceremony, while the bodies of the poor are carried out and exposed on mountains: in Ceylon, the remains of the indigent are interred in the neighbouring woods; the rich consumed on gorgeous funeral piles.

The Chinese inhume their dead at some distance from their cities and towns; it is only the bodies of the rich and noble that are allowed to remain on the premises of the family. Navarette mentions a curious custom prevalent in one of their provinces, Chan Si, where, in the event of two betrothed persons dying at the same period, they are married while their coffins are still in their former dwelling, and afterwards burnt together. The Hottentots bury their dead in the wild clefts of rocks and caverns; the Peruvians bear theirs to the neighbouring hills and mountains. The Greenlanders wrap their dead in furs and skins, and carry them to a considerable distance from their huts. In Kamtschatka and Siberia bodies are covered with snow in caverns and caves; and the African savages perform the same funeral rites as the Irish: their dead are carried to the burying-ground, followed by crowds of relatives and other people, who join the procession, bellowing and howling most

piteously, "Oh! why did you die? did you want anything that was ever denied you?" and after the funeral the survivors invariably get drunk on palm-wine, or any strong liquor they can procure; a custom similar to the *circumpotatio* of the Romans.

BURIED ALIVE.

EVERY nation, however uncivilised, holds the idea of being buried alive in constant dread ; the horrors of such a situation cannot be described. Bodies have been found where the miserable victims of precipitation had actually devoured the flesh of their arms in the agonies of hunger and despair. Such was the fate of John Scott and the Emperor Zeno. It is to be feared that this melancholy occurrence is more frequent than is supposed, more especially in countries where inhumation is speedily resorted to. The ancients were remarkably cautious in this respect, especially when we take into consideration the climate of Greece and Rome during the summer months. A law of Greece on this subject directs that " the corpse should be laid out at the relations' pleasure, but that the following morning before daylight the funeral procession should take place." From various quarters, however, it appears that the bodies were kept, three, and sometimes six days. Among the Romans several days were also allowed to elapse before interment,—sometimes seven days ; during which, loud cries, in which the de-

ceased was called by his name, and the noise of various instruments, resounded near the body; this was called the *conclamatio*, alluded to by Terence :

Desine, jam conclamatum est.

Lucan also alludes to this custom :

————— Sic funere primo
Attonitæ tacuere domus, quum corpora nondum
Conclamata jacent, nec mater crine soluto
Exigit ad sævos famularum brachia planctus.

It would be desirable that in cases where interment is speedily resorted to, a physician attended, in order to ascertain that death had actually taken place. This is seldom practised, from the common saying “ that it is uncivil on the part of a doctor to visit a dead patient.” Various means are employed to ascertain death: the looking-glass applied to the mouth of the corpse, to find out whether breath had departed, the coldness of the extremities, the falling of the lower jaw, the rigidity of the limbs, and various other appearances, are universally known; but in the villages of Italy and Portugal, pins and needles are frequently driven under the nails, in what is vulgarly called *the quick*, to excite an excruciating pain if life should not have fled. The most certain evidence, when bodies are long kept, is most decidedly the commencement of decomposition; but, in other cases, the action of the voltaic pile on a bared muscle is an infallible test. It is much

to be feared that on the field of battle and in naval actions many individuals apparently dead are buried or thrown overboard. The history of François de Civille, a French captain, who was missing at the siege of Rouen, is rather curious : at the storm of the town he was supposed to have been killed, and thrown, with other bodies, in the ditch, where he remained from eleven in the morning to half-past six in the evening ; when his servant, observing some latent heat, carried the body into the house. For five days and five nights his master did not exhibit the slightest sign of life, although the body gradually recovered its warmth. At the expiration of this time, the town was carried by assault, and the servants of an officer belonging to the besiegers, having found the supposed corpse of Civille, threw it out of window, with no other covering than his shirt. Fortunately for the captain, he had fallen upon a dunghill, where he remained senseless for three days longer, when his body was taken up by his relations for sepulture, and ultimately brought to life. What was still more strange, Civille, like Macduff, had been “ from his mother’s womb untimely ripp’d,” having been brought into the world by a Cæsarean operation, which his mother did not survive ; and after his last wonderful escape he used to sign his name with the addition of “ three times born, three times buried, and three times risen from the dead by the grace of God.”

The fate of the unfortunate Abbé Prevost, author of "Manon Lescaut," and other esteemed novels, was lamentable beyond expression. In passing through the forest of Chantilly, he was seized with an apoplectic fit: the body, cold and motionless, was found the following morning, and carried by some woodcutters to the village surgeon, who proceeded to open it; it was during this terrific operation that the wretched man was roused to a sense of his miserable condition by the agonies he endured, to expire soon after in all the complicated horrors of his situation.

SPONTANEOUS COMBUSTION.

THE singular fact of persons, more especially individuals who were in the habit of indulging in the use of spirituous liquors, having taken fire and been consumed, is authenticated beyond the slightest doubt. Little confidence, it is true, can be placed in the reports on this subject which occasionally appear in the newspapers of different countries; but many celebrated practitioners have witnessed and recorded the event, and physiologists have endeavoured to account for its causes. The celebrated Le Cat mentions a woman of Rheims who was found consumed at the distance of two feet from her chimney; the room exhibited no appearance of fire, but of the unfortunate sufferer nothing was found except her skull, the bones of the lower extremities, and some vertebræ. A servant-girl was accused of the murder, and condemned to death; but on her appeal, and a subsequent investigation, her innocence was fully ascertained.

Joseph Battaglia, a surgeon of Ponte Bosio, relates the following case:—Don G. Maria Bertholi, a priest of Mount Valerius, went to the fair of Fi-

letto, and afterwards visited a relation in Fenilo, where he intended to pass the night. Before retiring to rest, he was left reading his breviary ; when, shortly afterwards, the family were alarmed by his loud cries and a strange noise in his chamber. On opening the door, he was lying prostrate on the floor, and surrounded by flickering flames. Battaglia was immediately sent for, and on his arrival the unfortunate man was found in a most deplorable state. The integuments of the arms and the back were either consumed or detached in hanging flaps. The sufferer was sufficiently sensible to give an account of himself. He said that he felt all of a sudden as if his arm had received a violent blow from a club, and at the same time he saw scintillations of fire rising from his shirt-sleeves, which were consumed without having burnt the wrists ; a handkerchief, which he had tied round his shoulders, between the shirt and the skin, was intact. His drawers were also sound ; but, strange to say, his silk skull-cap was burnt, while his hair bore no marks of combustion. The unfortunate man only survived the event four days, when mortification of the burnt parts was most extensive, and the body emitted intolerable putrid effluvia. The circumstances which attended this case would seem to warrant the conclusion that the electric fluid was the chief agent in the combustion.

Bianchini relates the death of the Countess

Cornelia Bandi, of Cesena, who was in the habit of using frictions of camphorated spirits. She was found consumed close to her bed-side. No traces of fire could be observed in the room—the very lights had been burnt down to their sockets; but the furniture, closets, and linen were covered with a greyish soot, damp and clammy.

It is possible that this accident may be attributed to the escape of hydrogen gas; the presence of this inflammable body in animals is evident, and it is also proved that it is liable to ignite. Morton saw flames coming from the body of a pig. Bonami and Ruysch, with a lighted candle, set fire to the vapour arising from the stomach of a woman whom they were opening. In the *Memoirs of the Academy of Science of Paris*, of 1751, we find the case of a butcher, who, on opening the body of an ox that had died after a malady which had swollen him considerably, was severely burnt by an explosion and a flame which rose to the height of about five feet. Sturm, Bartholini, and Gaubius record fiery eructations in which, no doubt, phosphorated hydrogen had been formed in the stomach, and inflamed upon coming into contact with atmospheric air; the foetid odour which invariably accompanies these combustions appears to warrant the conclusion. It seems evident that this accident only occurs under certain conditions of the body; generally

in aged persons upwards of sixty years old; more frequently in women than in men, and chiefly when of indolent habits, a debilitated frame, and intemperate in their mode of living. That the body has been usually consumed long before the head and the extremities is evident, since these parts have been more commonly found than the trunk. It also has been ascertained by observation that this strange accident seldom occurs in summer, but principally during severe cold and frosty weather. It appears that some experiments have been recently made in the United States, when the blood flowing from the arm of a man addicted to spirituous liquors actually took fire, being placed in contact with a lighted taper!

BRASSICA ERUCA,

OR THE ROCKET PLANT.

THIS plant, now in total disuse, was considered by the ancients as a most powerful aphrodisiac, and consecrated to Venus. Hence Martial and Ovid—

Et Venerem revocans eruca morantem.

Nec minus erucas jubeo vitare salaces.

But the most curious document regarding this obnoxious weed is found in Lobel, who states that it was carefully cultivated in the gardens of monasteries and nunneries, to preserve their chastity.

“ Hæc eruca, major Hispanica, vel quia in condimentis lautior, vel ad venerem vegetior erat, gentilis vulgò vocata fuit ; quo vocabulo Hispanica et Itala gens designat quamlibet rem aptam reddere hominem lætum et expectatum ad munia vulgò pausibilia, ut joca ludicra et venerem ; quæ commoda ut ex eâ perciperet monachorum saginata caterva, in perquàm amœna Magalonæ, insula maris Narbonensis, hujus gentilis erucæ semine à fratre quodam Hispano ambulone do-

nato, quotannis hocce serebat, et in mensis cui-libet, vel maximo gulæ irritamento, vel blandimento, præferebat; nimirum usu gnara quantum frequens esus conferret ad calorem venereum in illis otio et frequenti crapula obrutum, ad vigorem animi excitandum, et præsertim corpus obesum extenuandum, somnumque excutiendum, quo illi veluti ursi gliresve tota hyeme saginati, fermè adipe suffocabantur. Verùm isto Hispanico remedio adeò hilarescebant et gentiles fiebant, ut plerumque recinctis lumbis castitate, coacti essent vota et cœnobii mœnia transilire, et aliquid solatii venerei ab vicinis plebanis efflagitare. Nobis hæc visa et risa. Eruca verò inibi superstes est copiosissima, monumentum futura monasticæ castitatis et rei veritatis.”—*Adv. p. 68.*

CAGLIOSTRO.

THE first appellation the Grecians gave to those who exercised the art of healing was *iatros*. Originally it merely signified a man possessed of the power of relieving accidents, either by manual exertions, or the hidden virtues of some amulet or charm. Sextus tells us that in ancient times it applied to an extractor of arrows, *sagittarum extractor*. No doubt, this operation constituted the chief business of the surgeon in the infancy of the art; and warriors and heroes themselves performed it on the field of battle, as fully exemplified in Homer.

The primitive title of *iatros* gradually descended to surgical practitioners. We find that Nebrus and Heraclides were the chief *iaters* of Cos, the birth-place of Hippocrates. To this day the same name is given to medical men in Greece, where, until lately, they were in the habit of perambulating the streets, and seeking occupation by crying out at certain distances, *Callos iatros!* (The good doctor!) Balsamo, a celebrated mountebank, being at Cairo, where he died, one of his

disciples repaired to Europe, and, anxious to bear a singular name, assumed this cry, and called himself *Calloiatro*, or, according to the corrupt pronunciation, *Cagliostro*: his history is well known, and he certainly excelled in impudence and industry all his predecessors. These Greek *iaters*, when going over to Italy to practise, called themselves *medici*, which Cato wanted to change into *mendici*, for, said he, "These creatures, (*Illi Græculi*,) quit their native country, where they were starving, to seek their fortune in Rome (*ut fortunam sibi mendicent*).” Under this austere censor few of these emigrants dared to settle in the Roman territories, but after his demise they inundated the country to such an extent, that it was said that Rome had more physicians than patients who needed their attendance. This influx of practitioners occasioned constant competition, and each *iater* endeavoured to obtain fame and emolument by underrating his opponents, and endeavouring to introduce novel doctrines, seeking a livelihood, as Pliny observed, *inter mortes et mendacia*. It was on these adventurers that the following epigram was written:

Fingunt se cuncti medicos,—idiota, sacerdos,
Judæus, monachus, histrio, rasor, anus.

In earlier times, the quackery of these candidates for popularity became the subject of bitter satire; and Martial thus speaks of the *Iatre Symmachus*:

Languebam, sed tu comitatus protinus ad me
Venisti centum, Symmache, discipulis ;
Centum me tetigere manus, aquilone gelatæ,
Non habui febrem, Symmache ; nunc habeo.*

This Symmachus, it appears, invariably moved abroad surrounded by hundreds of his disciples, whose cold investigating hands produced upon their patients the effects to which Martial alludes.

* These lines afford a convincing proof of the minute attention the ancients paid to the phenomena of nature. Our poet had no doubt observed the frequent effect of the application of cold to the surface of the body producing a reaction in the circulation tending to overcome the noxious agent by a glow of heat, which in many instances of predisposition may assume a febrile character.

LUNAR INFLUENCE

ON HUMAN LIFE AND DISEASES.

THE ancients, who were chiefly guided in their medical notions by the simple operations of nature, attached great importance to the influence of the moon. As the stars directed their navigators, so did the planets in some degree regulate their other calculations. Finding that the state of the weather materially acted on our organism whether in health or in sickness, they attributed this influence to the appearance of the moon, which generally foretold the vicissitudes in the atmospheric constitution. Thus Hippocrates advises his son Thessalus to study numbers and geometry, as the knowledge of astronomy was indispensable to a physician, the phenomena of diseases being dependent on the rising or the setting of the stars. Aristotle informs his disciples that the bodies of animals are cold in the decrease of the moon, that blood and humours are then put into motion, and to these revolutions he ascribes various derangements of women. To enter into these medical opinions would be foreign to the present purpose, but the notions of the ancients

regarding lunar influence in other matters are curious.

Lucilius, the Roman satirist, says that oysters and echini fatten during lunar augmentation; which also, according to Gellius, enlarges the eyes of cats: but that onions throw out their buds in the decrease of the moon, and wither in her increase, an unnatural vegetation, which induced the people of Pelusium to avoid their use. Horace also notices the superiority of shell-fish in the increase.

Pliny not only recognises this influence on shell-fish, but observes, that the streaks in the livers of rats answer to the days of the moon's age; and that ants never work at the time of any change: he also informs us that the fourth day of the moon determines the prevalent wind of the month, and confirms the opinion of Aristotle that earthquakes generally happen about the new moon. The same philosopher maintains that the moon corrupts all slain carcasses she shines upon; occasions drowsiness and stupor when one sleeps under her beams, which thaw ice and enlarge all things: he further contends, that the moon is nourished by rivers, as the sun is fed by the sea. Galen asserts that all animals that are born when the moon is falciform, or at the half-quarters, are weak, feeble, and short-lived; whereas those that are dropped in the full moon are healthy and vigorous.

In more modern times the same wonderful phenomena have been attributed to this planet. The celebrated Ambroise Paré observed, that people were more subject to the plague at the full. Lord Bacon partook of the notions of the ancients, and he tells us that the moon draws forth heat, induces putrefaction, increases moisture, and excites the motion of the spirits; and, what was singular, this great man invariably fell into a syncope during a lunar eclipse.

Van Helmont affirms, that a wound inflicted by moonlight is most difficult to heal; and he further says, that if a frog be washed clean, and tied to a stake under the rays of the moon in a cold winter night, on the following morning the body will be found dissolved into a gelatinous substance bearing the shape of the reptile, and that coldness alone without the lunar action will never produce the same effect. Ballonius, Diemerbroeck Ramazzini, and numerous celebrated physicians, bear ample testimony to its baneful influence in pestilential diseases. The change observed in the disease of the horse called moon-blindness is universally known and admitted.

Many modern physicians have stated the opinions of the ancients as regards lunar influence in diseases, but none have pushed their inquiries with such indefatigable zeal as the late Dr. Mosely; he affirms that almost all people in extreme age die at the new or at the full moon,

and this he endeavours to prove by the following records :

Thomas Parr died at the age of 152, two days after the full moon.

Henry Jenkins died at the age of 169, the day of the new moon.

Elizabeth Steward, 124, the day of the new moon.

William Leland, 140, the day after the new moon.

John Effingham, 144, two days after full moon.

Elizabeth Hilton, 121, two days after the full moon.

John Constant, 113, two days after the new moon.

The doctor then proceeds to show, by the deaths of various illustrious persons, that a similar rule holds good with the generality of mankind:

Chaucer, 25th October 1400, the day of the first quarter.

Copernicus, 24th May 1543, day of the last quarter.

Luther, 18th February 1546, three days after the full.

Henry VIII, 28th January 1547, the day of the first quarter.

Calvin, 27th May 1564, two days after the full.

Cornaro, 26th April 1566, day of the first quarter.

Queen Elizabeth, 24th March 1603, day of the last quarter.

Shakspeare, 23rd April 1616, day after the full.

Camden, 9th November 1623, day before the new moon.

Bacon, 9th April 1626, one day after last quarter.

Vandyke, 9th December 1641, two days after full moon.

Cardinal Richelieu, 4th December 1642, three days before full moon.

Doctor Harvey, 30th June 1657, a few hours before the new moon.

Oliver Cromwell, 3rd September 1658, two days after full moon.

Milton, 15th November 1674, two days before the new moon.

Sydenham, 29th December 1689, two days before the full moon.

Locke, 28th November 1704, two days before the full moon.

Queen Anne, 1st August 1714, two days after the full moon.

Louis XIV, 1st September 1715, a few hours before the full moon.

Marlborough, 16th June 1722, two days before the full moon.
 Newton, 20th March 1726, two days before the new moon.
 George I, 11th June 1727, three days after new moon.
 George II, 25th October 1760, one day after full moon.
 Sterne, 13th September 1768, two days after new moon.
 Whitfield, 18th September 1770, a few hours before the new moon.
 Swedenburg, 19th March 1772, the day of the full moon.
 Linnæus, 10th January 1778, two days before the full moon.
 The Earl of Chatham, 11th May 1778, the day of the full moon.
 Rousseau, 2nd July 1778, the day after the first quarter.
 Garrick, 20th January 1779, three days after the new moon.
 Dr. Johnson, 14th December 1784, two days after the new moon.
 Dr. Franklin, 17th April 1790, three days after the new moon.
 Sir Joshua Reynolds, 23rd February 1792, the day after the new moon.
 Lord Guilford, 5th August 1792, three days after the full moon.
 Dr. Warren, 23rd June 1797, a day before the new moon.
 Burke, 9th July 1797, at the instant of the full moon.
 Macklin, 11th July 1797, two days after full moon.
 Wilkes, 26th December 1797, the day of the first quarter.
 Washington, 15th December 1799, three days after full moon.
 Sir W. Hamilton, 6th April 1803, a few hours before the full moon.

The doctor winds up this extract from the bills of mortality by the following appropriate remark, "Here we see the moon, as she shines on all alike, so she makes no distinction of persons in her influence :

" ——— æquo pulsat pede pauperum tabernas,
 Regumque tures."

HOR. Lib. i. Od. 4.

Not only did the ancients consider the animal

creation as constantly under planetary influence, but all vegetable productions and medicinal substances were subject to its laws. The Druids of Gaul and Britain gathered the famed mistletoe with a golden knife when the moon was six days old. The vervain, held in such high repute by the Romans, was gathered, after libations of honey and wine, at the rising of the dog-star, and with the left hand, and thus collected, served for various sacerdotal and medical purposes: its branches were employed to sweep the temples of Jupiter; it was used in exorcisms for sprinkling lustral water; and moreover it cured fevers, the bite of venomous reptiles, and appeased discord; hence it was borne by those heralds who were sent to sue for peace, called *verbenarii*; and when its benign powers were shed over the festive board, mirth and good temper were sure to prevail. So generally and so highly appreciated was this all-powerful plant, that Pliny tells us,

Nulla herba Romanæ nobilitatis plus habet quam hierobotane.

However, it is somewhat doubtful whether the vervain of the ancients was similar to the plant which now bears that name. It would appear that formerly the appellation of *verbenæ* or *sagmina* was given to various plants employed in religious ceremonies; and branches of pine-tree, of laurel, and of myrtle were sometimes thus denominated. Virgil says in his Eclogues,

Verbenasque adole pingues, et mascula thura.

Now, the epithets of *pingues* and *thura* cannot apply to our vervain, but to some resinous production.

Medicine at that period might have been called an astronomic science; every medicinal substance was under a specific influence, and to this day the *R* which precedes prescriptions, and is admitted to represent the first letter of *recipe*, was in fact the symbol of Jupiter, under whose special protection medicines were exhibited. Every part of the body was then considered under the influence of the zodiacal constellations, and Manilius gives us the following description of their powers:

Namque Aries capiti, Taurus cervicibus hæret;
 Brachia sub Geminis censeantur, pectora Cancro;
 Te, scapulæ, Némæe, vocant, teque ilia, Virgo;
 Libra colit clunes, et Scorpius inguine regnat;
 Et femur Arcitenens, genua et Capricornus amavit;
 Cruraque defendit Juvenis, vestigia, Pisces.

Astronomicon, lib. 1.

SPECTACLES.

THE origin of these valuable instruments is uncertain: that the ancients were acquainted with the laws of refraction is beyond all doubt, since they made use of glass globes filled with water to produce combustion; and in Seneca we find the following very curious passage—"Litteræ, quamvis minutæ et obscuræ, per vitream pilam aquâ plenam majores clarioresque cernuntur;" yet thirteen centuries elapsed ere spectacles were known. It is supposed that they were first invented by *Salvino* or *Salvinio Armati*; but he kept his discovery secret, until *Alessandro de Spina*, a monk in *Pisa*, brought them into use in 1313. *Salvino* was considered their inventor, from the epitaph on his tomb in the cathedral church in *Florence*: "Qui giace *Salvino d'Armatato*, degl' *Armati di Firenze*, inventor delli occhiali, &c. 1317." Another circumstance seems to add weight to this presumption: *Luigi Sigoli*, a contemporary artist, in a painting of the Circumcision, represents the high-priest *Simeon* with a pair of spectacles, which, from his advanced age, it was supposed he might have needed on the occasion.

LEECHES.

THE origin of their introduction in the practice of medicine is uncertain. They were well known to the ancients under the name of *hirudo*; thus Horace:

“Non missura cutem nisi plena cruoris hirudo.”

And Pliny states that elephants were often cruelly tormented by them when they swallowed any of these worms in their water: “Cruciatum in potu maximum sentiunt haustâ hirudine, quam sanguisugam vulgò cœpisse appellari adverto.”

The collection of leeches constitutes a lucrative trade on the Continent, but more particularly in France, where it is called a leech-fishery. The following is an interesting description of the miserable people engaged in this occupation from the *Gazette des Hôpitaux*.

“If ever you pass through La Brenne, you will see a man, pale and straight-haired, with a woollen cap on his head, and his legs and arms naked; he walks along the borders of a marsh, among the spots left dry by the surrounding waters. This man is a leech-fisher. To see him from a distance,—his woe-begone aspect, his hol-

low eyes, his livid lips, his singular gestures,—you would take him for a maniac. If you observe him every now and then raising his legs and examining them one after another, you might suppose him a fool; but he is an intelligent leech-fisher. The leeches attach themselves to his legs and feet as he moves among their haunts; he feels their bite, and gathers them as they cluster about the roots of the bulrushes and aquatic weeds, or beneath the stones covered with a green and slimy moss. He may thus collect ten or twelve dozen in three or four hours. In summer, when the leeches retire into deep water, the fishers move about upon rafts made of twigs and rushes. One of these traders was known to collect, with the aid of his children, seventeen thousand five hundred leeches in the course of a few months; these he had deposited in a reservoir, where, in one night, they were all frozen *en masse*." But congelation does not kill them, and they can easily be thawed into life, by melting the ice that surrounds them. Leeches, it appears, can bear much rougher usage than one might imagine: they are packed up closely in wet bags, carried on pack-saddles, and it is well known that they will attach themselves with more avidity when rubbed in a dry napkin previous to their application. Leech-gatherers are in general short-lived, and become early victims to agues, and other diseases brought on by the

damp and noxious air that constantly surrounds them; the effects of which they seek to counter-act by the use of strong liquors.

Leeches kept in a glass bottle may serve as a barometer, as they invariably ascend or descend in the water as the weather changes from dry to wet, and they generally come to the surface prior to a thunder-storm. They are most voracious, and are frequently observed to destroy one another by suction; the strong ones attaching themselves to the weaker.

The quantity of blood drawn by leeches has been a subject of much controversy; but it is pretty nearly ascertained that a healthy leech, when fully gorged, has extracted about half an ounce.

Many serious accidents have arisen from leeches being swallowed in the water of swamps and marshes, too frequently drunk with avidity by the thirsty and exhausted soldier. Larrey mentions several cases of the kind during the French campaign in Egypt, and two fatal instances fell under my observation during the Peninsular war; draughts of salt-water, vinegar, and various stimulating injections could not loosen their hold, and they were too deeply attached in the throat to be seized with a forceps. Zacutus Lusitanus had witnessed the same unfortunate results. The leech thus swallowed is generally the *hirudo Alpina*.

Norfolk supplies the greater part of the leeches brought to London, but they are also found in Kent, Suffolk, Essex, and Wales. The best are the green, with yellow stripes along the body. The horse-leech, which is used in the north of Europe, but also common in England, is entirely brown, or only marked with a marginal yellow line. A popular belief prevails, that the application of this variety is most dangerous, as they are said to suck out all the blood in the body.

SOMNAMBULISM.

THIS singular aberration from our natural habits may be considered an intermediate state between sleeping and being awake. This infraction of physiologic laws may therefore be looked upon as a morbid condition. Physicians have given it various denominations, founded on its phenomena, *nocti-vagatio*, *nocti-surgium*, *noct-ambulatio*, *somnus vigilans*, *vigilia somnans*. Somnambulism was well known by the ancients; and Aristotle tells us, "there are individuals who rise in their sleep, and walk about seeing as clearly as those that are awake."

Diogenes Laertius states that Theon the philosopher was a sleep-walker. Galen slept whilst on a road, and pursued his journey until he was awakened by tripping on a stone. Felix Plater fell asleep while playing on the lute, and was only startled from his slumbers by the fall of the instrument. There is no doubt but that in somnambulists the intellectual functions are not only active, but frequently more developed than when the individuals are awake. Persons in this state have been known to write and correct verses,

and solve difficult problems, which they could not have done at other times. In their actions and locomotion they are more cautious, and frequently more dexterous, than when awake. They have been known to saddle and bridle horses, after having dressed themselves; put on boots and spurs, and afterwards ride considerable distances from home and back again. A sleep-walker wandering abroad in winter complained of being frozen, and asked for a glass of brandy, but expressed violent anger on being offered a glass of water. The celebrated sect of *Tremblers*, in the Cevennes mountains, used to rove about in their sleep, and, although badly acquainted with the French language, expressed themselves clearly and put up prayers in that tongue, instead of the Latin *Pater* and *Credo* which they had been taught. A singular phenomenon in some cases of this affection is that of walking about without groping, whether the eyelids are closed or open. Somnambulism has been known to be hereditary: Horstius mentions three brothers who were affected with it at the same period; Willis knew a whole family subject to it. It is not generally known that the subject of the French dramatic piece called "*La Somnambule*" was founded on fact.

The faculty of conversing in a state of somnambulism is too well authenticated to be doubted, although in many instances it was a fraudulent trick of animal magnetism. This singular power has been recorded by several of

the ancient writers, many of whom pretended that divine inspiration illumined the sleepers. Cicero tells us that when the Lacedæmonian magistrates were embarrassed in their administration, they went to sleep in the temple of Pasi-phæ, thus named from *Pasi phainein*, or ‘communicative to all.’ Strabo mentions a cavern, sacred to Pluto and Juno, where the sick came to consult sleeping priests. Aristides is said to have delivered his opinion while fast asleep in the temple of Æsculapius. It would be endless to quote all the authorities on this subject. Modern magnetisers, however, outstrip the ancients in the wonders they relate in regard to somnambulant faculties developed by magnetism. In 1829, Cloquet, a very distinguished Parisian surgeon, assisted by Dr. Chapelain, removed the cancerous breast of a lady in her magnetic sleep, during which she continued her conversation, unconscious of the operation, which lasted twelve minutes.

The faculty of seeing through the closed eyelids was fully substantiated in the presence of a commission of investigation appointed by the Academy of Medicine of Paris, and in the presence of fifteen persons. They found a somnambulist, of the name of Paul, to all appearance fast asleep. On being requested to rise and approach the window, he complied immediately. His eyes were then covered in such a manner as not to awaken him, and a pack of cards

having been shuffled by several persons, he recognised them without the slightest hesitation. Watches were then shown him, and he named the hour and minute, though the hands were repeatedly altered. A book was then presented to him,—it happened to be a collection of operas,—and he read *Cantor et Pollux* instead of *Castor et Pollux*, *Tragédie Lyrique*: a volume of Horace was then submitted to him, but not knowing Latin, he returned it, saying, “This is some church-book.” The celebrated Dr. Broussais laid before the same somnambulist a letter he had drawn from his pocket; to his utter surprise he read the first lines: the doctor then wrote a few words on a piece of paper in very small characters, which the somnambulist also read with the utmost facility; but, what was still more singular, when letters or books were applied to his breast or between the shoulders, he also perused them with equal accuracy and ease. In one instance the queen of clubs was presented to his back; after a moment’s hesitation he said, “This is a club—the nine;” he was informed that he was in error, when he recovered himself and said, “No, ’tis the queen:” a ten of spades was then applied, when he hastily exclaimed, “At any rate this is not a court-card; it is—the ten of spades.”

The many astute tricks played by animal magnetisers, and frequently detected, naturally induced most persons to doubt the veracity of these

experiments; but when we find that they were witnessed by seventy-eight medical men, most of them decidedly hostile to magnetism, and sixty-three intelligent individuals not belonging to the profession, and in every respect disinterested, what are we to say?—perhaps, exclaim with Hamlet,

There are more things in heaven and earth, Horatio,
Than are dreamt of in your philosophy!

MEDICAL POWERS OF MUSIC.

THE powerful influence of music on our intellectual faculties, and consequently on our health, has long been ascertained, either in raising the energies of the mind, or producing despondency and melancholy associations of ideas. Impressed with its sublime nature, the ancients gave it a divine origin. Diodorus tells us that it was a boon bestowed on mankind after the deluge, and owed its discovery to the sound produced by the wind when whistling through the reeds that grew on the banks of the Nile. This science became the early study of philosophers and physicians. Herophilus explained the alterations of the pulse by the various modes and rhythms of music. In the sacred writings we have many instances of its influence in producing an aptitude for divine consolation. The derangement of Saul yielded to the harp of David, and the hand of the Lord came upon Elisha as the minstrel played. In Egypt certain songs were legally ordained in the education of youth, to promote virtue and morality. Polybius assures us that music was required to soften the manners of the Arcadians, whose climate was heavy and

impure; while the inhabitants of Cynæthe, who neglected this science, were the most barbarous in Greece. The medical power of harmonious sounds was also fully admitted. We find Pythagoras directing certain mental disorders to be treated by music. Thales, called from Crete to Sparta, cured a disastrous pestilence by its means. Martinus Capella affirms that fevers were thus removed. Xenocrates cured maniacs by melodious sounds, and Asclepiades conquered deafness with a trumpet. In modern times it has been related of a deaf lady that she could only hear while a drum was beating, and a drummer was kept in the house for the purpose of enabling her to converse. Aulus Gellius tells us that a case of sciatica was cured by gentle modulations, and Theophrastus maintains that the bites of serpents and other venomous reptiles can be relieved by similar means. Ancient physicians, who attributed many diseases to the influence of evil spirits, fancied that harmonious sounds drove them away, more especially when accompanied by incantations; and we find in Luther, "that music is one of the most beautiful and glorious gifts of God, to which Satan is a bitter enemy."

In more modern times we have several instances of the medical powers of music, and the effect produced by Farinelli on Philip of Spain is well known. This monarch was in such a deplorable state of despondency from ill health, that he

refused to be shaved or to appear in public. On the arrival of Farinelli, the Queen was resolved to try the power of music, and a concert was ordered in a room adjoining the King's chamber : Farinelli sang one of his best airs, which so overcame Philip that he desired he might be brought into his presence, when he promised to grant him any reasonable request he might make. The performer, in the most respectful manner, then begged of the King to allow himself to be shaved and attended by his domestics, to which Philip consented. Farinelli continued to sing to him daily until a perfect cure was effected.—The story of Tartini is rather curious : in a moment of musical enthusiasm he fell asleep, when the devil appeared to him playing on the violin, bidding him with a horrible grin to play as well as he did ; struck with the vision, the musician awoke, ran to his harpsichord, and produced the splendid sonata which he entitled "*the Devil's*."

Curious anecdotes are related of the effect of music upon animals. Marville has given the following amusing account of his experiments. "While a man was playing on a trump-marine, I made my observations on a cat, a dog, a horse, an ass, a hind, some cows, small birds, and a cock and hens, who were in a yard under the window : the cat was not the least affected ; the horse stopped short from time to time, raising his head up now and then as he was feeding on

the grass; the dog continued for above an hour seated on his hind-legs, looking steadfastly at the player; the ass did not discover the least indication of his being touched, eating his thistles peaceably; the hind lifted up her large wide ears, and seemed very attentive; the cows slept a little, and, after gazing at us, went forward; some little birds that were in an aviary, and others on trees and bushes, almost tore their little throats with singing; but the cock who minded only his hens, and the hens who were solely employed in scraping a neighbouring dunghill, did not show in any manner that the trump-marine afforded them pleasure." That dogs have an ear for music cannot be doubted: Steibelt had one which evidently knew one piece of music from the other: and a modern composer, my friend Mr. Nathan, had a pug-dog that frisked merrily about the room when a lively piece was played, but when a slow melody was performed, particularly Dussek's Opera 15, he would seat himself down by the piano, and prick up his ears with intense attention until the player came to the forty-eighth bar; as the discord was struck, he would yell most piteously, and with drooping tail seek refuge from the unpleasant sound under the chairs or tables.*

Eastcot relates that a hare left her retreat to

* Much curious matter will be found in Mr. Nathan's valuable work upon music, entitled, "*Musurgia vocalis*."

listen to some choristers who were singing on the banks of the Mersey, retiring whenever they ceased singing, and reappearing as they recommenced their strains. Bossuet asserts, that an officer confined in the Bastille drew forth mice and spiders to beguile his solitude with his flute; and a mountebank in Paris had taught rats to dance on the rope in perfect time. Chateaubriand states as a positive fact, that he has seen the rattlesnakes in Upper Canada appeased by a musician; and the concert given in Paris to two elephants in the Jardin des Plantes leaves no doubt in regard to the effect of harmony on the brute creation. Every instrument seemed to operate distinctly as the several modes of the pieces were slow or lively, until the excitement of these intelligent creatures had been carried to such an extent that further experiments were deemed dangerous.

The associations produced by national airs, and illustrated by the effect of the *Rans des Vaches* upon the Swiss, are too well known to be related; and the *mal de pays*, or *nostalgia*, is an affection aggravated by the fond airs of infancy and youth during the sad hours of emigration, when the aching heart lingers after home and early ties of friendship and of love. It is somewhat singular, but this disease is frequent among soldiers in countries where they are forcibly made to march; but is seldom, if ever, observed in the fair sex,

who most probably seek for admiration in every clime.

The whims of musical composers have often been most singular: Gluck composed in a garden, quaffing champaign; Sarti, in a dark room; Paisiello, in his bed; Sacchini, with a favourite cat perched upon each shoulder. The extraordinary fancies of Kutschera, composer of the "Battle of Prague," are too well known, and led to his melancholy, but unpitied end.

Great as the repute of the most popular musical performers, whether vocal or instrumental, in the present day may be, and enormous as their remuneration may seem, the ancients were more profuse in their generosity to musicians and the factors of musical instruments. Plutarch, in his Life of Isocrates, tells us that he was the son of Theodorus a flute-maker, who had realised so large a fortune by his business, that he was able to vie with the richest Athenian citizens in keeping up the chorus for his tribe at festivals and religious ceremonies. Ismenias, the celebrated musician of Thebes, gave three talents, or 581*l.* 5*s.* for a flute. The extravagance of this performer was so great, that Pliny informs us he was indignant at one of his agents for having purchased a valuable emerald for him at Cyprus at too low a price, adding, that by his penurious conduct he had disgraced the gem. The vanity

of artists in those days appears to have been similar to the present impudent pretensions of many public favourites. Plutarch relates of this same Ismenias, that being sent for to play at a sacrifice, and having performed for some time without the appearance of any favourable omen in the victim, his employer snatched the instrument out of his hand, and began to play himself most execrably. However, the happy omen appeared, when the delighted bungler exclaimed that the gods preferred his execution and taste. Ismenias cast upon him a smile of contempt, and replied, "While I played, the gods were so enchanted that they deferred the omen to hear me the longer; but they were glad to get rid of you upon any terms." This was nearly as absurd as the boast of Vestris the Parisian dancer, who, on being complimented on his powers of remaining long in the air, replied, "that he could figure in the air for half an hour, did he not fear to create jealousy among his comrades."

Amœbæus the harper, according to Athenæus, used to receive an Attic talent of 193*l.* 15*s.* for each performance. The beautiful Lamia, the most celebrated female flute-player, had a temple dedicated to her under the name of Venus Lamia. The *Tibicina*, or female flute-players, who formed collegiate bodies, were as celebrated for their talent and their charms, as for their licentiousness and extravagance. Their performances

were forbidden by the Theodosian code, but with little success; since Procopius informs us that, in the time of Justinian, the sister of the Empress Theodora, who was a renowned amateur *tibicina*, appeared on the stage without any other dress than a slight and transparent scarf.

In the early ages of Christianity, the power of music in adding to religious solemnity was fully appreciated, and many of the fathers and most distinguished prelates cultivated the auxiliary science. St. Gregory expressly sent over Augustine the monk, with some singers, who entered the city of Canterbury singing a litany in the Gregorian chant, which extended the number of the four tones of St. Ambrose to eight. A school for church music was established at Canterbury; and it was also taught in the diocese of Durham and Weremouth. St. Dunstan was a celebrated musician, and was accused of having invented a most wonderful magic harp; it was, perhaps, to prove that the accusation was false, that he took the devil by the nose with a pair of tongs. This ingenious saint is said to be the inventor of organs, one of which he bestowed on the abbey of Malmesbury. It appears, however, that instruments resembling the organ were known as early as 364, and were described in a Greek epigram attributed to Julian the Apostate, in which he says, "I beheld reeds of a new species, the growth of each other, and a brazen soil; such as are not

agitated by winds, but by a blast that rushes from a leathern cavern beneath their roots; while a robust mortal, running with swift fingers over the concordant keys, makes them, as they smoothly dance, emit melodious sounds."

The influence of music on the fair sex has long been acknowledged, and this advantage has proved fatal to some artists who had recourse to its fascinating powers: Mark Smeaton was involved in the misfortunes of Anne Boleyn; Thomas Abel, who taught harmony to Catharine, met with a similar fate; and David Rizzio was not more fortunate. They were, perhaps, too much impressed with the ideas of Cloten: "I am advis'd to give her musick o' mornings; they say it will penetrate."

It is worthy of remark, that no woman was ever known to excel in musical composition, however brilliant her instrumental execution might have been. The same observation has been made in regard to logical disquisitions. To what are we to attribute this exception?—are we to consider these delightful tormentors as essentially unharmonious and illogical? We leave this important question to phrenologists.

THE FOOD OF MANKIND,

ITS USE AND ABUSE.

DESTINED by Providence to wander over the globe, and to live in various climes, man is essentially an omnivorous animal. According to the country he inhabits, its productions and the nature of his pursuits, his mode of living differs. The inhabitant of cold and sterile regions on the borders of the ocean becomes ichthyophagous; and fish, fresh, dried, smoked, or salted, is his principal nourishment. The bold huntsman lives upon the game he pursues; while the nomadian shepherd, who tends his herd over boundless steeps, supports himself on the milk of his flock. In warm countries, fruits and vegetables constitute the chief support of life; and there the disciples of Pythagoras can luxuriate on the rich produce of a bountiful soil, solely debarring themselves from beans, which, like all flesh, they consider to have been created by putrefaction. What would these good people have done amongst the Scythians and the Getæ, who, according to

Sidonius Apollinaris, mingled blood and milk for food—

————— Solitosque cruentum
Lac potare Getas, ac pocula tingere venis;

or the stunted natives of the arctic regions, who feed upon whales and seals, drink deep potations of train-oil, and consider the warm blood of the seal an exquisite beverage, dried herrings moistened with blubber a dainty, and the flesh of the seal half frozen in snow during winter, or half corrupted in the earth in summer, the most delicious morsel. The semi-barbarous Russians, who during the late wars enjoyed the abundant bills of fare of France and Italy, accustom themselves easily to their disgusting diet; and their troops, who live amongst the Samoiedes, thrive uncommonly well on raw flesh and rein-deer blood. It is in temperate regions that man displays his omnivorous propensities: there animal food can be abundantly procured; and every description of grain, roots, and fruits, easily cultivated. It is as we pass from these middle climes towards the poles, that animal substances are more exclusively consumed; and towards the equator that we enjoy refreshing fruits, and nourishing roots and vegetables. So scarce is food in some desolate tracts of the globe, that we find the wandering Indian satisfying his cravings with earth and clay; and Humboldt informs us that the Ottomaques, on the banks of the Mata and the Oronoco, feed on a fat unctuous earth, in the choice of which they dis-

play great epicurean skill, and which they knead into balls of four or six inches in diameter, and bake slowly over the fire. When about to be used, these clods are soaked in water, and each individual consumes about a pound of them in the day; the only addition which they occasionally make to this strange fare consists in small fish, lizards, and fern-roots.

The art of cookery has improved, no doubt, with the progressive advance and developement of our other institutions; and it seems to prove that the employment of all kinds of food is as natural to man, as a stationary uniformity and restriction to one species of aliment is to animals. A most erroneous idea has prevailed regarding the use of animal food, which has been considered as the best calculated to render mankind robust and courageous. This is disproved by observation. The miserable and timid inhabitants of Northern Europe and Asia are remarkable for their moral and physical debility, although they chiefly live on fish or raw flesh; whereas the athletic Scotch and Irish are certainly not weaker than their English neighbours, though consuming but little meat. The strength and agility of the negroes is well known, and the South Sea islanders can vie in bodily exercises with our stoutest seamen. We have reason to believe, that, at the most glorious periods of Grecian and Roman power, their armies were principally subsisted upon bread, vegetables, and fruits.

Man by his natural structure was created omnivorous, and there is no doubt but that a judicious mixed alimentation is the best calculated to insure health and vigour, and enable the ambitious or the industrious wanderer to spend his winters near the poles, colonize beneath the equator, or inhabit regions where the hardiest of animals must starve and die. The teeth, the jaws, all the digestive organs fit him for this mode of existence. There is a curious passage in one of Dr. Franklin's letters in regard to wine: he pleasantly observes, that the only animals created to drink water are those who from their conformation are able to lap it on the surface of the earth, whereas all those who can carry their hands to their mouth were destined to enjoy the juice of the grape.

The diversity of substances which we find in the catalogue of articles of food is as great as the variety with which the art or the science of cookery prepares them; the notions of the ancients on this most important subject are worthy of remark. Their taste regarding meat was various. Beef they considered the most substantial food; hence it constituted the chief nourishment of their *athletæ*. Camels' and dromedaries' flesh was much esteemed, their heels more especially. Donkey-flesh was in high repute; Mæcenas, according to Pliny, delighted in it; and the wild ass, brought from Africa, was compared to venison. In more modern times we find Chancellor Dupret

having asses fattened for his table. The hog and the wild boar appear to have been held in great estimation; and a hog was called "animal propter convivium natum;" but the classical portion of the sow was somewhat singular—"vulvâ nil dulcius amplâ." Their mode of killing swine was as refined in barbarity as in epicurism. Plutarch tells us that the gravid sow was actually trampled to death, to form a delicious mass fit for the gods. At other times, pigs were slaughtered with red-hot spits, that the blood might not be lost; stuffing a pig with asafœtida and various small animals, was a luxury called "porcus Trojanus;" alluding, no doubt, to the warriors who were concealed in the Trojan horse. Young bears, dogs, and foxes, (the latter more esteemed when fed upon grapes,) were also much admired by the Romans; who were also so fond of various birds, that some consular families assumed the names of those they most esteemed. Catius tells us how to drown fowls in Falernian wine, to render them more luscious and tender. Pheasants were brought over from Colchis, and deemed at one time such a rarity, that one of the Ptolemies bitterly lamented his having never tasted any. Peacocks were carefully reared in the island of Samos, and sold at such a high price, that Varro informs us they fetched yearly upwards of 2000% of our money. The guinea-fowl was considered delicious; but, wretched people! the Romans knew

not the turkey, a gift which we moderns owe to the Jesuits. Who could vilify the disciples of Loyola after this information ! The ostrich was much relished ; Heliogabalus delighted in their brains, and Apicius especially commends them. But, of all birds, the flamingo was not only esteemed as a *bonne-bouche*, but most valuable after dinner ; for, when the gluttonous sensualists had eaten too much, they introduced one of its long scarlet feathers down their throats, to disgorge their dinner. The modern gastronome is perhaps not aware that it is to the ancients he owes his delicious fattened duck and goose livers, —the inestimable *foies gras* of France. Thus Horace :

Pinguibus et ficis pastum jecur anseris albi.

The swan was also fattened by the Romans, who first deprived it of sight ; and cranes were by no means despised by people of taste.

While the feathered creation was doomed to form part of ancient delights, the waters yielded their share of enjoyments, and several fishes were immortalised. The *muræna Helena* was educated in their ponds, and rendered so tame that he came to be killed at the tinkling of his master's bell or the sound of his voice.

Natat ad magistrum delicata muræna,

says Martial. Hirtius ceded six thousand of these fish to Cæsar as a great favour, and Vitellius delighted in their roe. The fame of the

lamprey, or the *mustela* of Ausonius and Pliny, is generally known; and the sturgeon, the *acipenser sturio*, was brought to table with triumphant pomp: but the turbot, one of which was brought to Domitian from Ancona, was considered such a present from the gods, that this emperor assembled the senate to admire it. Soles were also so delectable, that, punning on the word *solea*, they were called the *soles* of the gods: the dorad, *sparus auratus*, was consecrated to Venus; the *labrus scarus* was called the brain of Jupiter, and Apuleius and Epicharmus maintain that its very entrails would be relished in Olympus.

The *garum*, or celebrated fish-sauce of the Romans, was principally made out of the *sciæna umbra*, and the mackerel; the entrails and blood being macerated in brine until they became putrid.

Expirantis adhuc scombri, de sanguine primo
Accipe fastosum munera cara garum: —

thus says Martial: and Galen affirms that this disgusting preparation was so precious, that a measure of about three of our pints fetched two thousand silver pieces. So delightful was the effluvium of the *garum* considered, that Martial informs us it was carried about in onyx smelling-bottles. But our luxurious civic chiefs are not aware that the red mullet—for such I believe was the *mullus*—was held in such a distinguished cate-

gory among genteel fishes, that three of them, although of small size, were known to fetch upwards of 200*l*. They were more appreciated when brought alive, and gradually allowed to die, immersed in the delicious garum; when the Romans feasted their eyes in the anticipated delight of eating them, by gazing on the dying creature as he changed colour like an expiring dolphin. Seneca reproaches them with this refinement of cruelty—"Oculis quoque gulosi sunt;" and the most renowned of Apicius's culinary discoveries was the *alec*, a compound of their livers.

Snails were also a great dainty. Fulvius Herpinus was immortalised for the discovery of the art of fattening them on bran and other articles; and Horace informs us they were served up, broiled upon silver gridirons, to give a relish to wine. Oysters were brought from our coasts to Rome, and frozen oysters were much extolled. Grasshoppers, locusts, and various insects, were equally acceptable to our first gastronomic legislators. Acorns, similar to those now eaten in Spain, formed part of a Roman dessert; the best were brought from Naples and Tarentum. It does not appear that the ancients had a great variety in their vegetable diet; condiments to stimulate the sluggish appetite seemed to be their principal research: amongst these the *asa-foetida*, which is to this day highly relished in

the East, was an indispensable ingredient; this has been doubted by various naturalists, but it appears certain, since Pliny informs us that it was frequently adulterated by *sagapenum*, which bears the strongest resemblance to it. This substance was called *laser*, and by many tasteless persons, such as Aristophanes and Apuleius, considered offensive and disgusting; hence the latter, “*lasere infectas carnes*,” and “*laseratum porcellum*.” According to Theophrastus, *asafoetida* was collected and preserved, as it is at present, in skins; and, despite its estimation as a culinary ingredient, it was not unfrequently named *stercus diaboli*. In addition to this gum, they seasoned their food with various other strong articles, such as coriander and cummin seeds, sumac, saffron, cinnamon, thyme; with diverse peppers, salt, and sal-ammoniac.

Instead of bread, which was only introduced in Rome 580, A. D. they used a heavy kind of unleavened paste, similar to the present *polenta*. This nourishment occasioned frequent indigestion, hence the use of warm water after meals, and the necessity of emetics. Warm water was sold about the streets in their thermopolia, and Seneca observed the paleness and debility that arose from its use and abuse:

Et potet calidam, qui mihi livet, aquam.

While water was thus freely drunk, wine was not disregarded; but the various articles with

which it was adulterated, must have rendered it anything but a delectable potation according to our received ideas. Thus we see the Greeks putting salt and sea-water in theirs; at other times dissolving mastic and myrrha, or infusing wormwood, in their choicest Falernian. Like modern tasters, however, they knew the method of developing the *bouquet* by warmth; and, to appreciate the flavour, they frequently added hot water. That wines of a resinous taste were esteemed, appears from Martial :

Resinata bibis vina, Falerna fugis.

But we may conclude that, according to our modern taste, their boasted wines did not equal ours either in flavour or in delicacy.

The cooks of the ancients appear to have been much more consummate in their art than our modern practitioners. Athenæus records various descriptions of their incomparable science. A new dish immortalised its inventor, and transmitted his name to posterity. Apicius's cakes were called Apicians; and Aristoxenes had attained such perfection in curing hams, that the glorious appellation of Aristoxenians was bestowed upon them. Philosophers and poets gloried in their culinary science; the pleasures of the table were the subject of their writings and their conversation. Archestratus tells us with delight, that, although various delicacies can only be enjoyed in their proper season, yet we can talk

about them with watering mouths all the year round.

One of these illustrious ministers of luxury attained such a degree of enviable perfection, that he could serve up a pig boiled on one side and roasted on the other, and moreover stuffed with all possible delicacies, without the incision through which these dainties were introduced being perceived. Supplicated to explain this wonderful secret, he swore solemnly by the manes of all the heroes who fell at Marathon, or conquered at Salamis, that he would not reveal this sacred mystery for one year. When the happy day arrived and he was no longer bound by his vows, he condescended to inform his anxious hearers, that the animal had been bled to death by a wound under the shoulder, through which the entrails were extracted; and afterwards hanging up the victim by the legs, the stuffing was crammed down his throat. One half of the pig was then covered with a thick paste, seasoned with wine and oil, put into a brass oven, and gently and tenderly roasted: when the skin was brown and crisp, our hero proceeded to boil the other moiety; the paste was then removed, and the boiled and roasted grunter triumphantly served up.

So refined was the taste of the ancient *bons vivans*, that Montanus, according to Juvenal,

would proclaim, at the first bite, whether an oyster was of English produce or not. Sandwich is believed to have been the favoured spot whence Rome imported her oysters and other shell-fish. Shrimps and prawns must have been in great estimation, since we find Apicius quitting his residence at Minturnæ, upon hearing that the shrimps of Africa were finer than those he could procure in Campania. He instantly set sail for the happy coast, despite a gale of wind : after encountering a desperate storm, he reached the wished-for land of promise ; but alas!—the fishermen displayed the largest prawns they could collect, and, to his cruel disappointment, they would not vie, either in delicacy or beauty, with those of Minturnæ. He immediately ordered his pilot to steer a homeward course, and left Africa's shore with ineffable contempt.

These ingenious gluttons had recourse to every experiment that could add to their enjoyment. Philoxenus, and many others, used to accustom themselves to swallow hot water, that they might be able to attack scalding dishes before less fire-proof guests would dare to taste them.

Sinon maintained that cookery was the basis of all arts and sciences : natural philosophy taught us the seasoning of dishes ; architecture directed the construction of stoves and chimneys ; the fine arts, the beautiful symmetry of each

dish ; and the principles of war were applied to the drilling and marshalling of cooks, confectioners, and scullions, posting proper sentries to watch the fires, and videttes to keep off idle intruders. That man is a “cooking animal” is considered one of his proudest attributes, and a proper bill of fare may be considered as the *ne plus ultra* of human genius !

While climate points out the most suitable articles of food, it exercises a singular influence over their qualities and properties, more especially in vegetable substances. We find plants which are poisonous in some countries, edible and wholesome in others. Next to climate, culture and soil modify plants in a singular degree : flowers which yield a powerful perfume in some latitudes, are inodorous in others ; and, according to climate, their aroma is pleasant or distressing. A striking proof of this fact can be adduced from the well-known effects of perfumes in Rome ; where the inhabitants, especially females, cannot support the scent even of the rose, which has been known to produce syncope, illustrating the poet’s line, to

Die of a rose in aromatic pain.

This variety in the action of vegetable substances is more particularly observable in such as are considered medicinal. Opium, narcotics, and various drugs, are more powerful in warm climates than

in northern regions. The Italian physicians express astonishment at the comparatively large doses prescribed by our practitioners.

Cultivation brings forth singular intermediate productions; and by its magic power we have seen the coriaceous and bitter almond transformed into the luscious peach, the sloe converted into the delicious plum, and the common crab transformed into the golden pippin. The same facts are observed in vegetables; the celery sprung from the nauseous and bitter *apium graveolens*, and the colewort, is metamorphosed into the cabbage and the cauliflower. All cruciform plants degenerate within the tropics, but acquire increased energies in cold countries.

Recent experiments in Germany have demonstrated that, in times of scarcity, the wood of several trees may be converted into a nutritious substance. The fibres of the beech, birch, lime, poplar, fir, and various other trees, when dried, ground, and sifted into an impalpable powder, constitute a very palatable article of food. If cold water be poured on this ligneous flour, inclosed in a linen bag, it becomes milky, and considerable pressure and kneading is required to express the amylaceous or starchy part of it. Professor Von Buch, in his travels through Norway and Lapland, has fully described the Norwegian *barke bröd*. We find the savages scattered along the coast of the great austral continent mixing up a paste of

the bark of the gum-tree with the ants and the other insects, with their larvæ, which they find in it. Ground dried fish and fish-bones have from time immemorial been converted into bread ; Arrianus tells us that Nearchus found several nations on the shores of the Red Sea living upon a bread of this description.

Various philosophers, in idle disquisitions, have endeavoured by the most absurd hypotheses to determine what is the natural food of man, and to show that he is not created omnivorous. The comparison between our species and animals confutes these vain theories. The masticatory and digestive organisation of man assigns to him an intermediate rank between carnivorous and herbivorous creatures. The teeth may be said by their figure and construction to bear a relation with our natural food. The teeth of flesh-eating animals rise in sharp prominences to seize and lacerate their prey, and those of the lower jaw shut within those of the higher one. The herbivorous animals are not armed with these formidable weapons, but have broad flat surfaces with intermixed plates of enamel, that they should wear less rapidly in the constant labour of grinding and triturating. In the carnivorous the jaws can only move backward and forward ; in the herbivorous their motion is lateral, as observed in the cow when chewing her cud. Beasts of prey tear and swallow their food in masses, while in others it undergoes a careful

comminution before it is transmitted to the stomach. The teeth of man only resemble those of carnivorous animals by their enamel being confined to the external surface, while in the freedom of the motion of the jaws from side to side they partake of the conformation of the herbivorous. The teeth and jaws of man are in all respects more similar to those of monkeys than any other animals; only in some of the simiæ the canine teeth are much longer and stronger, and denote a carnivorous propensity.

It is to the abuse of this omnivorous faculty that Providence has bestowed upon mankind, that we owe many of the diseases under which our species labours. "*Multos morbos, multa fercula fecerunt,*" sayeth Seneca; yet we are far more temperate in the present age than the ancients during the period of their high civilization and prosperity. Their excesses must have been of the most disgusting nature, since, to indulge more early in their gluttonous propensities, they had recourse to emetics both before and after their meals. "*Vomunt ut edant, edunt ut vomant, et epulas quas toto orbe conquirunt nec concoquere dignantur,*" was the reproach of the above-quoted philosopher. Suetonius and Dion Cassius give Vitellius the credit of having introduced this revolting custom into fashion; and splendid vessels for the purpose were introduced in their feasts. Martial alludes to it in the following lines:

Nec cœnat priùs, aut recumbit, antè
Quam septem vomuit meri deunces.

And Juvenal tells us that the bath was polluted by this incredible act of bestiality,—

Et crudum pavonem in balneâ portas.

The sums expended by the ancients on their table exceed all belief. Vitellius expended for that purpose upwards of 3200*l.* daily, and some of his repasts cost 40,000*l.* At one of them, according to Suetonius, 7000 birds and 2000 fish were served up. Ælius Verus laid out 600,000 sesterii on one meal; and some of the dishes of Heliogabalus cost about 4000*l.* of our money. The excesses of this monster were such that Herodianus affirms he wanted to ascertain, not only the flavour of human flesh, but of the most disgusting and nameless substances. The freaks related of this emperor are scarcely credible; but his gastronomic profusion may be easily conceived when we find that his very mats were made with the down of hares or the soft feathers found under the wings of partridges! When such ideas of *enjoyment* prevailed, can we wonder that Philoxenus should have wished that he had the throat of a crane, that he might prolong the delights of eating!

Our early ancestors were remarkable for their frugality, and it is supposed that luxurious, or, at least, full living was introduced by the Danes: it has been even asserted that the verb *gormandize*

was derived from *Gormond*, a Danish king, who was persuaded by Alfred to be baptized. Erasmus observed that the English were particularly fond of good fare. William the Conqueror, and Rufus, were in the habit of giving most splendid entertainments; and the former monarch was such an irascible epicure, that upon one occasion, an underdone crane having been served up by the *master of the cury*, he would have knocked him down but for the timely interference of his *dapifer*, or purveyor of the mouth. This office of *dapifer*, with that of *lardrenius*, *magnus coquus*, *coquorum prepositus*, and *coquus regius*, were high dignitaries in those days. Cardinal Otto, the pope's legate, being at Oxford in 1238, his brother was his *magister coquorum*; and the reasons assigned for his holding that office were his brother's suspicious fears "*ne procuraretur aliquid venenosum, quod valdè timebat legatus.*" These officers were not unfrequently clergymen, who were elevated to the bench for their valuable services.

The heroic conduct of French cooks has been recorded in history, and compared with the noble devotion of the ancients. Vatel, maître d'hôtel of Louis XIV, put an end to his wretched existence in consequence of fish not having arrived in time for dinner. On this sad event being reported to his sovereign, he both praised and blamed his courage; and, to use the words of Madame de

Seigné, he perished “à force d’avoir de l’honneur à sa manière; on loua fort et l’on blama son courage.” It is strange that Napoleon should have used the very same expressions when speaking of one of his most distinguished generals. In more modern times we have heard of persons who expected that clerical functions should be combined with various lay duties, as appears by the following curious advertisement in a late paper :

“Wanted, for a family who have bad health, a sober, steady person, in the capacity of doctor, surgeon, apothecary, and man-midwife. He must occasionally act as butler, and dress hair and wigs. He will be required sometimes to read prayers, and to preach a sermon every Sunday. A good salary will be given.” This was certainly an economical speculation for the use of soul and body.

Cooks have sometimes been obliged to resort to pious frauds; and it is related of our Richard Cœur de Lion, that, being very ill during the holy wars, he took a strange fancy for a bit of pork, but, as no pig could be procured, a plump Saracen child was roasted as a substitute; and it was remarked that Richard was ever after partial to pork.

There is little doubt but that our forefathers were harder liver than the present generation: even within the memory of man, drinking to excess is a vice seldom observed, excepting in some individuals belonging to the old school. The hours

of refection have been singularly altered; and while our fashionable circles seldom sit down to table before seven o'clock in the evening, we find in olden chronicles that even royalty was used to dine at nine in the morning, more especially upon the Continent. In the *Heptæmeron* of the Queen of Navarre we find an account of the manner of spending the day :

“ As soon as the morning rose, they went to the chamber of Madame Oysille, whom they found already at her prayers; and when they had heard during a good hour her lecture, and then the mass, they went to dine at ten o'clock, and afterwards each privately retired to his room, but did not fail at noon to meet in the meadow. Vespers heard, they went to supper; and after having played a thousand sports in the meadow they retired to bed.”

During the reign of Charles V. of France, the court dined at ten, supped at seven, and retired to rest at nine. Holinshed gives the following curious description of our early diet: “ Our tables are oftentimes more plentifully garnished than those of other nations, and this trade hath continued with us since the very beginning; for, before the Romans found out and knew the way into our country, our predecessors fed largely upon flesh and milk, whereof there was great abundance in this isle, because they applied their chief studies unto pasturage and feeding.

“In Scotland, likewise, they have given themselves unto very ample and large diet, wherein as for some respect nature doth make them equal with us, so otherwise they far exceed us in over much and distemperate gormandize, and so engross their bodies, that divers of them do oft become unapt to any other purpose than to spend their time in large tabling and belly cheer. In old times these North Britons did give themselves universally to great abstinence; and in time of war their soldiers would often feed but once, or twice at the most, in two or three days, especially if they held themselves in secret, or could have no issue out of their bogs and morasses, through the presence of an enemy; and in this distress they used to eat a certain kind of confection, whereof so much as a bean would qualify their hunger above common expectation. In those days, also, it was taken for a great offence over all to eat either goose, hare, or hen, because of a certain superstitious opinion which they had conceived of these three creatures. Amongst other things, baked meats, dishes never before this man’s (James I.) days seen in Scotland, were generally so provided for by virtue of this act, that it was not lawful for any to eat of the same under the degree of a gentleman, and those only but on high and festival days. In number of dishes and changes of meat, the nobility of England (whose cooks are for the most part musical-headed Frenchmen and

strangers) do most exceed ; sith there is no day in manner that passeth over their heads, wherein they have not only beef, mutton, veal, lamb, kid, pork, cony, capon, pig, or so many of these as the season yieldeth, but also some portion of the red and fallow deer, beside great variety of fish and wild fowl, and thereto sundry other delicates, wherein the sweet hand of the sea-faring Portingale is not wanting ; so that for a man to dine with one of them, and to taste of every dish that standeth before him, is rather to yield unto a conspiracy, with a great deal of meat for the speedy suppression of natural health, than the use of a necessary mean to satisfy himself with a competent repast, to sustain his body withal. The chief part, likewise, of their daily provision is brought in before them commonly in silver vessels, if they be of the degree of barons, bishops, and upwards, and placed upon their tables ; whereof when they have taken what it pleaseth them, the rest is reserved, and afterwards sent down to their serving-men and waiters.

“The gentlemen and merchants keep much about one rate, and each of them contenteth himself with four, five, or six dishes, when they have but small resort ; or peradventure with one or two, or three at the most, when they have no strangers. And yet their servants have their ordinary diet assigned, besides such as is left at their masters’ boards, and not appointed to be brought thither

the second time, which nevertheless is often seen, generally in venison, lamb, or some especial dish whereon the merchantman himself liketh to feed when it is cold.

“ At such times as the merchants do make their ordinary or voluntary feasts, it is a world to see what great provision is made of all manner of delicate meats from every quarter of the country, wherein, beside that they are often comparable herein to the nobility of the land, they will seldom regard any thing that the butcher usually killeth, but reject the same as not worthy to come in place. In such cases, also, *geliffes* of all colours, mixed with a variety in the representation of sundry flowers, herbs, trees, forms of beasts, fish, fowls, and fruits; and thereunto *marchpane* wrought with no small curiosity, tarts of divers hues and sundry denominations; conserves of old fruits, foreign and home-bred; suckets, codiniacs, marmalades, sugar-bread, ginger-bread, florentines, wild-fowl, venison of all sorts, and sundry outlandish confections, altogether seasoned with sugar, (which Pliny calls *mel ex arundinibus*, a device not common nor greatly used in old times at the table, but only in medicine, although it grew in Arabia, India, and Sicilia,) do generally bear the sway, besides infinite devices of our own not possible for me to remember. Of the potatoe, and such *venerous* roots as are brought out of Spain, Portingale, and the Indies, to furnish our banquets, I speak not,

wherein our *Mures*, of no less force, and to be had about Crosby Ravenswath, do now begin to have place.

“ And as all estates do exceed in strangeness and number of costly dishes, so these forget not to use the like excess in wine, insomuch as there is no kind to be had (neither anywhere more store of all sorts than in England, although we have none growing with us ; but yearly the proportion of twenty or thirty thousand tun and upwards, notwithstanding the daily restraints on the same brought over to us,) whereof at great meetings there is not some store to be had. Neither do I mean this of small wines only, such as claret, white, red, French, &c. which amount to about fifty-six sorts, according to the number of regions from whence they come ; but also of the thirty kinds of Italian, Grecian, Spanish, Canarian, &c. whereof *Vernage*, *Cate-pument*, *Raspis*, *Muscadell*, *Romnie*, *Bastard Fire*, *Osey*, *Caprike*, claret, and malmsey, are not least of all accounted of, because of their strength and value. For as I have said of meat, so, the stronger the wine is, the more it is desired, by means whereof in old times the best was called *Theologicum*, because it was had from the clergy and religious men, unto whose houses many of the laity would often send for bottles filled with the same, being sure that they would neither drink nor be served of the worst, or such as was any ways mingled or brewed by the vint-

ner ; nay, the merchant would have thought that his soul should have gone straightways to the devil, if he should have served them with any other than the best. Furthermore, when they have had their course which nature yieldeth, sundry sorts of artificial stuff, as *ypocras* and worm-wood wine, must in like manner succeed in turns, beside stale ale and strong beer, which nevertheless bear the greatest brunt in drinking, and are of so many sorts and ages as it pleaseth the brewer to make.

“ In feasting, the artisans do exceed after their manner, especially at bridals, purifications of women, and such like odd meetings, where it is incredible to tell what meat is consumed and spent; each one bringing such a dish, or so many, as his wife and he do consult upon, but always with this consideration, that the *leefer* (the more liberal) friend shall have the best entertainment. This is also commonly seen at these banquets, that the good man of the house is not charged with any thing, saving bread, drink, house-room, and fire.

“ Heretofore there hath been much more time spent in eating and drinking than commonly is in these days ; for whereas of old we had breakfasts in the forenoon, *beverages* or *nuntions* after dinner, and thereto *rere suppers*, generally when it was time to go to rest (a toy brought in by Hard-Canutus), now these odd repasts, thanked be God ! are very well left, and each one in manner (except

here and there some young hungry stomach that cannot fast till dinner-time) contenteth himself with dinner and supper only. The Normans, disliking the gormandise of Canutus, ordained, after their arrival, that no table should be covered above once in the day; which Huntingdon imputeth to their avarice: but, in the end, either waxing weary of their own frugality, or suffering the cockle of old custom to overgrow the good corn of their new constitution, they fell to such liberty, that in often feeding they surmounted Canutus surnamed the Hardy; for whereas he covered his table but three or four times in the day, they spread their cloths five or six times, and in such wise as I before rehearsed. They brought in also the custom of long and stately sitting at meat, which is not yet left, although it be a great expense of time, and worthy reprehension; for the nobility and gentlemen, and merchantmen, especially at great meetings, do sit commonly till two or three of the clock at afternoon, so that with many it is an hard matter to rise from the table to go to evening prayer, and return from thence to come time enough to supper."

The early prevalence of drinking in England seems to have been derived from our foreign intercourse. In the reign of Elizabeth and James I. we find various statutes against ebriety. Tom Nash, in his "*Pierce Pennilesse*" says, "Superfluity in drink is a sin that ever since we have mixed

ourselves with the Low Countries is counted honourable; but, before we knew their lingering wars, was held in that highest degree of hatred that might be. Then, if we had seen a man go wallowing in the streets, or lain sleeping under the board, we should have spit at him, and warned all our friends out of his company."

According to our laws intoxication is looked upon as an aggravation of any offence. Sir Edward Coke calls a drunkard *voluntarius dæmon*. The Romans thought differently: with them intoxication was often deemed an extenuation of guilt, "*Per vinum delapsis capitalis pœna remittitur.*" The Greeks, more severe, had a law of Pittacus that enacted the infliction of a double punishment on those who committed a crime when drunk.

That hard drinking was introduced from Flanders and Holland, and other northern countries, seems probable from the derivation of many of the expressions used in carousing. The phrase of being "half-seas over," as applied to a state of drunkenness, originated from *op zee*, which in Dutch means *over sea*; and Gifford informs us that it was a name given to a stupifying beer introduced in England from the Low Countries, and called *op zee*; thus Jonson in his *Alchemist*:

I do not like the dulness of your eye;
It hath a heavy cast, 'tis *up see Dutch*.

An inebriating draught was also called an *up*

see freeze, from the strong *Friesland* beer. The word 'carouse,' according to Gifford and Blount, is derived from the name of a large glass, called by the Danes *rouse*, or from the German words *gar*, *all*, and *ausz*, *out*: hence drink *all out*.

Nash, in the work above quoted, says, "Now he is nobody that cannot drink *super nagulum*, carouse the hunters' *hoope*, quaff *upsee freze crosse*, with healths, gloves, mumpes, frolickes, and a thousand such domineering inventions." The origin of these slang terms is not quite evident. Drinking *super nagulum*, or on the nail, was a northern custom which consisted in only leaving one drop in the cup, which was poured upon the thumb-nail, to prove that justice had been done to the potation or toast; and that, to use the language of modern drinkers, the glass was *cleared*. This custom is alluded to by Bishop Hall in his "Mundus alter et idem," in which the Duke of Tenderbelly exclaims, "'Let never this goodly-formed goblet of wine go jovially through me:' and then he set it to his mouth, stole it off every drop, save a little remainder, which he was by custom to set upon his thumb's nail and lick it off." In Fletcher we find the phrase

I am thine *ad unguem*;

which meant he was ready to drink with him to this extent. The term *hoop* alludes to the marks of hoops being traced upon drinking pots to point

out certain measures. Jack Cade says, "The three-hooped pot shall have ten hoops, and I will make it felony to drink small beer!" Hence probably the common saying of "drinking deep," or to the last hoop. The *peg tankard* was another measured vessel used in the jollifications of our forefathers, and is still to be found in some parts of England, more especially in Derbyshire. Pegge, in his "Anonymiana," thus describes them: "They have in the inside a row of eight pins, one above the other, from top to bottom; the tankard holds two quarts, so that there is a gill of ale between each peg or pin. The first person who drank was to empty to the first peg, the second was to drink to the next, and so on; by which means the pegs were so many measures to the comptators, making them all drink alike or the same quantity." In Archbishop Anselm's Canons, made in the council at London in 1102, priests are enjoined not to go to drinking bouts, nor to *drink pegs*: "Ut presbyteri non eant ad potationes, nec ad *pinnas* bibant."

Gloves, also called *shoeing-horns*, were relishes to encourage drinking, like our modern *devils*, introduced for a similar purpose. Bishop Hall says in his description of a carousal, "Then comes me up a service of *shoeing-horns* of all sorts,—salt cakes, red-herrings, anchovies, and gammon of bacon, and abundance of such *pullers on*." Massinger thus describes these incentives:—

I usher

Such an unexpected dainty bit for breakfast
As never yet I cooked; 'tis not *botargo*,
Fried frogs, potatoes marrow'd, cavear,
Carps' tongues, the pith of an English chine of beef,
Nor our Italian delicate oil'd mushrooms,
And yet a *drawer on too*; and if you show not
An appetite, and a strong one, I'll not say
To eat it, but devour it, without grace too,
(For it will not stay a preface,) I am shamed,
And all my past provocatives will be jeer'd at.

The *botargo* was a relish made of mullets' roes, and highly seasoned, much in use among the Italians.

Amongst many other curious frolics of hard drinkers, we find the use of what they called *flap-dragons*, or *snap-dragon*, which consisted in igniting combustible substances, which were swallowed while floating on the glass of liquor. Johnson describes them "a play in which they catch raisins out of burning brandy, and, extinguishing them by closing the mouth, eat them." This prank is not uncommon to the present day in boarding-schools in certain festive entertainments of the *young ladies*.

Drunkenness being considered a beastly propensity, its gradations were fixed by animal comparisons. In a curious treatise on drunkards by George Gascoigne, we find the following illustrations of these degrees: "The first is *ape-drunk*, and he leaps and sings and hallos and danceth for the hearers; the second is *lion-drunk*, and he

flings the pots about the house, calls the hostess w——, breaks the glass windows with his dagger, and is apt to quarrel with any man that speaks to him; the third is *swine-drunk*, heavy, lumpish, and sleepy, and cries for a little more drink and a few more clothes; the fourth is *sheep-drunk*, wise in his own conceit, when he cannot bring forth a right word; the fifth is *maudlin-drunk*, when a fellow will weep for kindness in the midst of his drink, and kiss you, saying, ‘By G—! Captain, I love thee! Go thy ways; thou dost not think so often of me as I do of you; I would I could not love thee so well as I do!’ and then he puts his finger in his eye and cries; the sixth is *martin-drunk*, when a man is drunk, and drinks himself sober ere he stir; the seventh is *goat-drunk*, when in his drunkenness he hath no mind but in lechery; the eighth is *fox-drunk*, when he is crafty drunk, as many of the Dutchmen be, which will never bargain but when they are drunk. All these species, and more, I have seen practised in one company at one sitting.”

Drunkenness has at various periods been resorted to in religious and political fervour. During the usurpation of Cromwell, the Cavaliers were wont to drink their king’s health in bumpers of wine in which some crumbs of bread had been thrown, exclaiming, “God send this *Crum-well* down!” and Whitelocke, in his Memorials, records the following barbarous Catilinian orgies: “Five

drunkards agreed to drink the king's health in their blood, and that each of them should cut out a piece of his buttock, and fry it upon the grid-iron, which was done by four of them, of whom one did bleed so exceedingly that they were fain to send for a chirurgeon, and so were discovered. The wife of one of them, hearing that her husband was amongst them, came to the room, and, taking up a pair of tongs, laid about her, and so saved the cutting of her husband's flesh."

The laws enacted to prevent drunkenness at various periods, and by different governments, are curious. Domitian ordered all the vine-plants in the Roman territory to be rooted out. Charles IX. of France issued a similar edict. In 1536, under Francis I, a law was passed sentencing drunkards to imprisonment on bread and water for the first offence; a public whipping punished a second infringement; and, on reiteration, banishment and the loss of ears. The ancients, equally aware of the danger that arose from intoxication, were also anxious to prevent it. Draco inflicted capital punishments. Lycurgus destroyed the vineyards. The Athenians had officers, named *ophthalmos*, to prevent excesses in liquor drinking. In Rome, patricians were not allowed the use of wine until they had attained their thirty-fifth year. Wine was only drunk pure in the beginning of sober repasts in honour of *Deus Sospes*, and afterwards mixed with water in honour of *Jupiter*

Servator. Notwithstanding these wise examples in support of prudent precepts, it appears that drunkenness was a common vice amongst the Romans. Tiberius was surnamed *Biberius*; and it was said of the parasite Bibulus, “dum vixit, aut bibit aut minxit.” Aurelianus had officers of his household whose duty was to intoxicate foreign ambassadors; and Cato’s partiality for the juice of the grape has been recorded by Horace,

Narratur et prisca Catonis
Sæpe mero caluisse virtus.

In the middle ages, drinking was resorted to by the monks as a religious libation; and they also drank to the dead, a custom which was condemned as idolatrous. These excesses were restrained by various regulations, and in 817 the quantity of wine allowed each monk was fixed at five pints. Charlemagne, in his Capitularies, forbids the provocation of drinking healths and hob-nobbing (*pléger et trinquer*). Temperance societies are not modern institutions. In 1517, Sigismund de Dietrichstein established one under the auspices of St. Christopher; a similar association was formed in 1600 by Maurice Duke of Hesse, which, however, allowed a knight to drink seven *bocaux*, or glasses, at each meal, but only twice in the day. The size of these *bocaux* is not recorded, but no doubt it was an endeavour to obtain a comparative condition of sobriety. Another temperate society, under the name of the Golden

Ring, was instituted by Frederic V. Count Palatine.

Whether the influence of temperate societies or their advocates will tend to diminish the consumption of wine and spirituous liquors in the British empire, it is difficult to say. Hitherto every act of interference, either from individuals or on the part of the legislature, has proved not only abortive, but has increased the evil it was intended to remedy. The imposition of heavy duties only threw the distillation of spirits into the hands of illicit speculators instead of respectable capitalists; and, as M'Culloch justly remarks, "superadded the atrocities of the smuggler to the idleness and dissipation of the drunkard." During the latter part of the reign of George I. and the earlier period of George II. gin-drinking was so prevalent, that it was denounced from the pulpit and the press. At length ministers determined to make a vigorous effort to put a stop to the further use of spirituous liquors except as a cordial or medicine. To accomplish this end, a duty of twenty shillings was laid on spirits, exclusive of a heavy licence duty to retailers, while a fine of 100% was levied on all defaulters. But instead of the anticipated effects, this act produced results directly opposite: the respectable dealers withdrew from a trade proscribed by the legislature; and the sale of spirits fell into the hands of the lowest and most profligate charac-

ters. The officers of the revenue were hunted down by the populace, and did not dare to enforce the law ; and Tindal, in his *Continuation of Rapin*, says, “ within two years of the passing of this act, it had become so odious and contemptible, that policy as well as humanity forced the commissioners of excise to mitigate its penalties.” During these two years twelve thousand persons were convicted of offences connected with the sale of spirits, while no exertion could check the torrent of smuggling, and seven millions of gallons illicitly distilled were annually consumed in London and its environs. Our present consumption of British, Colonial, and Foreign spirits is immense, but not equal to what it was at the period alluded to. The following is the account of this consumption in 1832 :—

In England,	1,530,988	imperial gallons,	Foreign.
	3,377,507	„	Colonial.
	7,259,287	„	British.
In Scotland,	69,236	gallons,	Foreign.
	112,026	„	Colonial.
	5,407,097	„	British.
In Ireland,	33,413	„	Foreign.
	24,432	„	Colonial.
	8,657,756	„	British.

In that year, 1832, the total amount of spirits that paid duty in the United Kingdom was 26,462,58 gallons, yielding a revenue of 8,483,247*l*. In the same year the appearance and dread of the cholera produced a singular increase in the

consumption of brandy. In the preceding year, 1831, the entries for home use in England had amounted to 1,194,717 gallons; but during this state of alarm it increased to 1,508,924; in 1833, the danger having subsided, the consumption declined to its former level, and did not exceed 1,356,620 gallons.

From the above observations it may be inferred, that no penal enactments, no denunciations of canting senators or fanatic preachers, will ever succeed in checking the evils which must arise from excesses in the use of spirituous liquors. Gluttony and drunkenness can only be combated by the salutary effects of good example held out by the superior classes of society; by a gradual improvement in the moral education of the lower grades, for whom salutary amusements should be procured when a cheerful repose from their weekly labour will no longer be considered a breach of the sabbath. Diffusion of knowledge and habits of industry will do more than sanctimonious admonitions, and the Penny Magazines may be considered more hostile to gin-drinking than the ranting of pseudo-saints.

INFLUENCE OF IMAGINATION.

INNUMERABLE are the diseases that arise from our busy fancy. We are all subject to the tyrannic sway of imagination's empire. Under this mighty influence man displays energies which lead him boldly to dare danger and complicated sufferings, or he is reduced to the most degraded state of miserable despondency. These diseases are the more fearful, since they rarely yield to physical aid, and it is seldom that moral influence is sufficiently persuasive to combat their inveteracy. It is idle to tell the timid hypochondriac that he is not ill; the mere circumstance of his believing himself sick, constitutes a serious disorder. His constant apprehensions derange his functions until an organic affection arises. The patient who fancies that he labours under an affection of the heart, disturbs the circulation, which is ever influenced by our moral emotions, till at last this disturbance occasions the very malady which he dreaded. These aberrations of the mind arise from various causes,—mental emotions, constitution, climate, diet, hereditary disposition, education. Tertullian called phi-

losophy and medicine twin sisters ; both may become powerful agents in controlling our imagination. The ancients have variously endeavoured to determine the seat of this faculty. Aristotle placed it in the heart, which, from the sense of its oppression observed in acute moral sufferings, he considered the origin of our nerves, or sensorium. Avicenus and other philosophers located imagination in the anterior portion of the brain, which he called the *prow* ; memory in the posterior part, which he denominated the *poop*, and judgment in the centre of the organ, or what mariners would term *mid-ship*. The notions of Gall and Spurzheim had long since been anticipated by philosophers and physicians, both in regard to the divisions of the cerebral organ, and the external appearance of the cranium, which denoted their preponderancy. That temperature exercises a powerful influence over our mental faculties, is evident. In warm climates we find a greater exaltation of the mind, more enthusiasm and vivid emotions, than in northern latitudes. The East is the land of fancy, illustrated by their wondrous tales of fiction, and their vivid and fantastic imagery, displayed in the chimeras and the arabesques of their palaces and temples. In these regions all the passions are uncontrollable and wild. Love is characterised by furious, or dark jealousy, according to the rank and power of the lover ; and ambition is signalled by bloodthirsty and promiscuous barbarity.

No opposition can be brooked : man is either a ferocious tyrant, or an abject slave ; subjection alone preventing the oppressed from being as sanguinary as the oppressor. Government is despotism, and religion fatality and fanaticism. In northern climes, on the contrary, every thing is cold and calculating. The almighty passion of love may prevail ; but its demonstrations are morose, concentrated, although not less ferocious than under a southern sky. In the one country man seeks the dark shelter of the forest, and the solitude of the mountain, to ponder over his grievances, or soliloquise on his sufferings ; in the other he courts the roseate bower and the orange grove, to lull him into a soft repose which may calm his feelings by temporary oblivion, to be roused again to action by the stimulus of opium, tobacco, and a burning sun. The ancients were so fully convinced of this influence of the amorphous constitution, that Lucianus tells us that the Abderites, a people so remarkable for their stupidity and sluggishness that *Abderitica mens* was proverbial, having witnessed the performance of one of Euripides's plays under the fierce solar rays, became fired with such enthusiasm, that they ran about the streets in a wild phrenzy, repeating aloud his sublime verses, until the coolness of the evening restored them to reason and to their native torpor. So predominant are these feelings, which owe their

character to climate, that they regulate our ideas of a future state, as well as our conduct on earth. The paradise of the Mohammedan is a blessed region of everlasting pleasure and sensual enjoyments; beauteous houris await the soul, which is to luxuriate in corporeal voluptuousness; and the purple wine, forbidden to the living, is to flow in delectable streams, to delight the dead, who may, in the seventh paradise, inhabit a land where rivers of wine, and milk, and honey, are ever flowing; where evergreen trees bend under luxurious fruits, whose very pips are transformed into lovely maidens, so sweet—to use their own metaphorical language—that the ocean would lose its bitterness if they but condescended to spit in its briny waters; and all these enjoyments are secured to the true believer by hosts of guardian angels, who have seventy thousand mouths, and seventy thousand tongues, to praise God seventy thousand times each day in seventy thousand languages: and such is their horror of earthly heat, that in the other world one of the greatest rewards is the delight of being able to sleep under the cool shade of a tree, each leaf of which is of such an expanse that a man might travel fifty thousand years under its benign protection. How different is the paradise of Odin! There, it is true, the soul of the departed dwells in magnificent palaces; but what are his enjoyments compared to those of the sensual Asiatic! Instead of soft

music, the din of war is constantly to resound in his ear, while he luxuriates in drinking strong beer and hydromel, poured by the fair Valknas, the houris of the Vahalla paradise, in the skulls of his enemies. Their god is called the god of crows; and two of these sable familiars, *Hugin*, who represents the mind, and *Nunin*, or memory, are constantly perched upon his shoulders, until they take flight to seek information for their master.

To this day it is said that the Tartars fancy, that, in their future abode of bliss, their reward will be a sort of Platonic affection, and a perpetual and undisturbed state of meditation; in short, a celestial *far niente*. So convinced were the ancients of this effect of peculiar temperature, that the morose Heraclitus maintained that the power of the mind arose from a *dry splendour*; that all things were created by solar heat; and when ill himself, he sought health by endeavouring to dispel watery accumulations by the heat of a dunghill. Ptolemy and Posidonius assert, that southern climes engender genius and wit, and are better calculated for the study of things divine; and Plato, Hippocrates, and Galen, on the same principle, affirm that stupidity and forgetfulness are produced by cold and humidity. The celebrated Descartes, in his younger days, states that he felt his enthusiasm moderated by the damps and cold of Holland; and that he ever

experienced more facility in pursuing his philosophic studies in winter than in summer. Poets, on the contrary, court the glowing rays of an inspiring sun, and their Phoebus and their Apollo is the conductor and the inspirer of the Muses :

Cynthius aurem vellit et admonuit.

That the energies of our intellectual faculties are under the influence of our food, is a fact long since observed. The stupidity of the athletæ, who lived upon coarse bread (coliphium), and underdone meat, was proverbial ; even Hercules laboured under the imputation of a mind somewhat obtuse. Our genius, our energies, are all affected by our mode of living. The rule of *Sanis omnia sana*, of Celsus, is applicable to very few individuals ; and all our faculties may be rendered more keen or less vivid by temperance or excesses. As the nature of our *ingesta* influences the functions of our digestive organs, so do these organs in their turn influence our moral powers when our physical energies are elevated or depressed. Our courage, our strength of mind, our religious and our moral train of thinking, are under the control of diet. Fasting has ever been considered as predisposing to meditation and ascetic contemplation. Tertullian tells us, that we should approach the altars fasting, or having eaten nothing but dry substances. All the religious ceremonies of the Egyptians were preceded by abstinence, and their sacrificators were allowed neither

animal food nor wine ; similar privations were observed by all those who attended the mysteries of Juno and Ceres. In Holy Writ we find that it was after abstinence that Divine inspiration illumined the elect. The angel appeared unto Daniel after he had been three weeks without tasting flesh, or wine, or “pleasant bread.” In the Acts, x, we find that the vision appeared to Peter, “when he had become hungry and would have eaten.” Moses fasted forty days on Mount Sinai. We find in Jonah, that even cattle were frequently subject to this mortification, when he proclaimed in Nineveh that neither man nor beast, herd nor flock, should taste any thing ; “let them not feed nor drink water.” Congius Ripensis tells us, that the same restriction was imposed by the Lacedæmonians on their Helots and all domestic animals. Fasting was considered by the early Christians as an essential rite. St. Anthony prescribed to his disciples one meal of dry bread, salt and water, in the day, without any food on Wednesdays and Fridays. In the monastery of Mocham, in Egypt, a monk of the name of Jonas was beatified for having lived until the age of eighty-five, working hard in the garden, and without any other food than raw herbs and grass steeped in vinegar ; this abstemious cenobite added to his claims to canonization by always sleeping in his chair. St. Hilarius only ate fifteen figs and six

ounces of barley-bread *per diem*. St. Julian Sabus retired to a cavern, where he only luxuriated once in the week on millet-bread, with salt and water; and St. Macarius resolved to outdo him by restraining his sustenance to a few cabbage-leaves every Sunday. Not only did these gastric martyrs attribute their holy visions to abstinence, but they considered it as the source of their longevity. Thus, St. Anthony lived to the age of one hundred and five; St. Paphinus to ninety on dry bread; and St. Paul the Hermit thrived for one hundred and fifteen years upon dates. It is not derogatory to their supposed divine mission to say that all these men were as enthusiastic as the fakirs of the East. So acceptable to the Deity was starvation considered, that at various periods it was enforced by penal laws. Charlemagne denounces the punishment of death on all those who transgressed in this respect; and, by an old Polish edict, any sinner who ate on a fast-day was sentenced to have all his teeth drawn. However, monkish ingenuity endeavoured to elude these severe enactments, by interpreting the letter instead of the spirit; and we find, in the regulations of a German monastery, the following accommodation, "*Liquidum non frangit jejunium*," by which, on days of penance, the monks only took rich soups and succulent broth. In latter days, being permitted to eat fish in Lent, they saw no reason why fowl should not be

included, on the authority of Genesis, that the water brought forth every winged fowl after his kind. This relaxation in culinary discipline called forth loud indignation from many prelates. St. Ambrosius attributes the profligacy of the monks to these excesses; and Tertullian considers the fall of the Israelites as the punishment of their neglect in this respect. Our Shakspeare illustrates this belief in the influence of fasting as preparatory to inspiration.

Last night the very gods show'd me a vision—
I *fast* and pray'd for their intelligence.

Not satisfied with this mystification in food, we find some austere monks endeavouring to reduce carnal appetites by other means, such as by blood-letting, *monialem minuere*; and claustral flesh was brought down by phlebotomy and purging at regular periods. To this day we find that well-behaved Turks, during the Ramasan, make it a godly point never to swallow their saliva.

This digression on fasting was somewhat necessary, to show how much our diet tends to modify our being. It is well known that troops will display more activity and courage when fasting than after a meal; and an ingenious physician of our day is perfectly correct when he attributes a daring spirit or a pusillanimous feeling to the influence of our stomach.

Intellectual weakness, frequently brought on by excesses, has proved a rich source to empiricism ;

hence the belief in mystic and supernatural agencies, and the power of certain nostrums. Coloured fountain water and bread pills have made the fortune of various quacks, when imaginary cures have relieved imaginary diseases. In our days, numerous have been the recoveries attributed to Hohenloe's prayers. Trusting to mystic numbers, three, five, seven, or nine pills have produced effects, when other numbers less fortunate would have failed. To this hour mankind, even in enlightened nations, are fettered by these absurd trammels. Credulity, and Superstition her twin sister, have in all ages been the source whence priestcraft and quackery have derived their wealth. Next to these rich mines we may rank fashion. The adoption of any particular medicine by princes and nobles will endow it with as great a power as that which was supposed to be vested in regal hands in the cure of scrofula, hence called *king's evil*; and we have too many instances of such cures having been effected by a monarch's touch to doubt the fact. The history of the potato is a strong illustration of the influence of authority: for more than two centuries the use of this invaluable plant was vehemently opposed; at last, Louis XV. wore a bunch of its flowers in the midst of his courtiers, and the consumption of the root became universal in France. The warm bath, so highly valued by the Romans, once fell into disrepute, because the Emperor Augustus had been cured

by a cold one, which for a time was invariably resorted to. Thus Horace exclaims,

——— Caput ac stomachum supponere fontibus audent
Clusinis, Gabiosque petunt et frigida rura.

Unfortunately, the means which had relieved Augustus killed his nephew Marcellus ; and the *Laconicum* and the *Tepidarium* were again crowded with the “fashion.”

Persecution and its prohibitions have also been most powerful in working upon our imagination. Rare and forbidden fruits will always be considered more desirable than those we can easily obtain. The history of tobacco is a striking instance of this influence of difficulty upon the mind of man. Pope Urban VIII. prohibited its use in any shape, under the penalty of excommunication. It was afterwards forbidden in Russia, under the pain of having the offender's nose cut off. In some cantons of Switzerland the prohibition was introduced in the decalogue, next to the commandment against adultery. Amurath IV. ordered all persons taken in *flagranti delicto*, smoking tobacco, to be impaled, on the principle that its use checked the progress of population. The denunciation of our James I. may be considered as a masterpiece of the imaginary horrors attributed to this obnoxious weed. “It is,” he says, “a custome loathsome to the eye, hatefull to the nose, harmefull to the braine, dangerous to the lungs, and in the black stinking fume thereof nearest resem-

bling the horrible Stygian smoake of the pit that is bottomlesse." During the reign of this monarch such a restriction might have been necessary, unless the consumption of tobacco enriched the exchequer; for it appears that some *amateurs* consumed no less than £500 per annum in smoke. Surely we should reap some flourishing revenue from fashion and credulity, when we find our government awarding £5000 to a *certain* Johanna Stephens for her discovery of *certain* medicines for the cure of *calculi*! The same imaginary hope induced many a credulous creature to minister to the necessities of another Johanna, for *certain* expectations. Alas! how this indefinite *sense* exhibits the infinite folly of poor humanity!

A morbid imagination, although frequently the source of much misery, will prove in many cases the fountain-head of many noble qualities; its exaltation constitutes genius, which is, in fact, a natural disposition of individual organization sometimes bordering upon insanity. "*Non est magnum ingenium sine mixturâ dementiæ*," says Seneca; and Montaigne observes, "De quoi se faict la plus subtile folie que de la plus subtile sagesse? il n'y a qu'un demi-tour à passer de l'une à l'autre." Aristotle asserts that all the great men of his time were melancholy and hypochondriac. The ancient and eastern nations entertained a singular idea regarding men of innate genius, and possessed of more than common attributes; they

fancied that they were the first-born, and the offsprings of illicit love : Zoroaster, Confucius, Mahomet, Vishnou, were born of virgins ; and Theseus, Hercules, Castor and Pollux, and Romulus, were all illegitimate.

Of the miseries the hypochondriacs experience, the following extract of a letter to a physician will afford a specimen : “ My poor body is a burning furnace, my nerves red-hot coals, my blood is boiling oil ; all sleep has fled, and I am suffering martyrdom. I am in agony when I lie on my back ; I cannot lie on either side ; and I endure excruciating torture when I seek relief by lying on my stomach ; and, to add to my misery, I can neither sit, stand, nor walk.” The fancies of hypochondriacs are frequently of the most extraordinary nature : one patient imagines that he is in such a state of obesity as to prevent his passing through the door of his chamber or his house ; another, impressed with the idea that he is made of glass, will not sit down for fear of cracking ; a third seems convinced that his head is empty ; and an intelligent American, holding a high judicial seat in our West India colonies, could not divest himself of the occasional conviction of his being transformed into a turtle.

The most melancholy record of the miseries of hypochondriacism is to be found in the diary of Dr. Walderstein of Gottingen. He was a man much deformed in person, and his mind seemed as distort-

ed as his body. Although of deep learning and research, and convinced of the absurdity of his impressions, yet he was unable to resist their baneful influence. "My misfortune," says the doctor, "is, that I never exist in this world, but rather in possible combinations created by my imagination to my conscience. They occupy a large portion of my time, and my reason has not the power to banish them. My malady, in fact, is the faculty of extracting poison from every circumstance in life; so much so that I often felt the most wretched being because I had not been able to sneeze three times together. One night when I was in bed I felt a sudden fear of fire, and gradually became as much oppressed by imaginary heat as though my room were in flames. While in this situation, a fire-bell in the neighbourhood sounded, and added to my intense sufferings. I do not blush at what might be called my superstition any more than I should blush in acknowledging that my senses inform me that the earth does not move. My error forms the *body* of my judgment, and I thank God that he has given it a *soul* capable of correcting it. When I have been perfectly free from pain, as is not unfrequently the case when I am in bed, my sense of this happiness has brought tears of gratitude in my eyes. I once dreamt," adds Walderstein, "that I was condemned to be burnt alive. I was very calm, and reasoned coolly during the execution of my sentence. 'Now,' I said to my-

self, 'I am burning, but not yet burnt; and by-and-by I shall be reduced to a cinder.' This was all I thought, and I did nothing but think. When, upon waking, I reflected upon my dream, I was by no means pleased with it, for I was afraid I should become *all thought and no feeling*." It is strange that this fear of thought, assuming a corporeal form in deep affliction, had occurred to our poet Rowe, when he exclaims in the Fair Penitent, "*Turn not to thought my brain*." "What is very distressing," continues the unfortunate narrator, "is, that when I am ill I can think nothing, feel nothing, without bringing it home to myself. It seems to me that the whole world is a mere machine, expressly formed to make me feel my sufferings in every possible manner." What a fearful avowal from a reflecting and intelligent man! Does it not illustrate Rousseau's definition of reason—*the knowledge of our folly*?

PHRENOLOGY.

ALTHOUGH Gall and Spurzheim may fairly claim the merit of having developed in this science the particular parts of the brain that are the seat of different faculties, yet we find in various ancient writers similar notions. Burton, in his *Anatomy of Melancholy*, thus expresses himself on this subject: "*Inner senses* are three in number, so called because they are in the brain-pan; as, *common sense*, *phantasie*, *memory*. This common sense is the judge or moderator of the rest, by whom we discern all differences of objects: *the fore part of the brain* is his organ or seat. *Phantasie*, or imagination, which some call *æstivative*, or *cogitative*, (confirmed, saith Fernelius, by frequent meditation,) is an inner sense, which doth more fully examine the species perceived by *common sense* of things present or absent, and keeps them longer, recalling them to mind again, or making new of his own: his organ is the *middle cell of the brain*. *Memory* layes up all the species which the senses have brought in, and records them as a good register, that they may be forthcoming when they are called for by *phantasie* and

reason: his organ is the back part of the brain." This corresponds with the account of the faculties given by Aristotle, and repeated by the writers of the middle ages. Albertus Magnus, Bishop of Ratisbon, designed a head divided into regions according to these opinions in the thirteenth century; and a similar plan was published by Petrus Montaguana in 1491. Ludovico Dolce published another engraving on the subject at Venice in 1562. In the British Museum is a chart of the universe and the elements of all sciences, and in which a large head of this description is delineated. It was published at Rome in 1632. In the *Tesoretto* of Brunetto Latini, the preceptor of Dante, we find this doctrine taught in the following lines:

Nel capo son tre celle,
Ed io dirò di quelle,
Davanti è lo intelletto
E la forza d'apprendere
Quello que puote intendere;
In mezzo è la ragione
E la discrezione,
Che scherme buono e male;
E lo terno e l'iguale
Dirietro sta con gloria
La valente memoria,
Che ricorda e ritiene
Quello ch'in essa viene.

PERFUMES.

At all periods perfumes seem to have been more or less adopted as a luxury among the wealthy and fashionable. Tradition states that they were frequently rendered instrumental to sinister purposes, as the vehicle of poisonous substances. Historians relate that the Emperor Henri VI, and a prince of Savoy, were destroyed with perfumed gloves. Jeanne d'Albret, Queen of Navarre, and mother of Henri IV, died from the poisonous effect of gloves purchased from the noted René, perfumer and confidential agent of Catherine de Medicis. Lancelot, King of Naples, was destroyed by a scented handkerchief prepared by a Florentine lady. Pope Clement VII. sunk under the baneful effluvia of a torch that was carried before him; and Mathioli relates, that nosegays thus impregnated have been frequently known to prove fatal. It is certain that, without the aid of venenous substances, various flowers have caused serious accidents. Barton tells us that the *magnolia glauca* occasioned a paroxysm of fever, and increased the severity of an attack of gout. Jacquin had seen the *lobelia*

longiflora producing a sense of suffocation ; and the *nerium oleander*, in a close chamber, has caused death. The injurious effects of bulbous flowers in giving rise to violent head-aches, giddiness, and even fainting, are generally known. The horror roses inspire to the Roman ladies is scarcely credible ; and Cromer affirms that it was to the odour of that ornament of our gardens that the death of one of the daughters of Nicolas I, Count of Salm, and of a Polish bishop, was attributed. The sympathetic effect that this flower can create is illustrated by Capellini, who saw a lady fall into a syncope on perceiving a rose in a girl's bosom, although it turned out to be an artificial one. The partiality or antipathy to certain odours is equally unaccountable, for the Italian ladies, who dread the rose, delight in the disgusting aroma of rue, which they carry about as a salubrious plant, that, according to their notions, dispels the *cattiva aria*, although it is not impossible that they might fancy it possessed of those salutary qualities to which Ovid had alluded :

Utilius summas acuentes lumina rutas,
Et quidquid veneri corpora nostra negat.

Rue, according to Serenus Samonicus, was one of the ingredients of the fabled antidote of Mithridates, which he thus describes :

Antidotus verò multis Mithridatica fertur
Consociata modis, sed magnus Scrinia regis

Cùm raperit victor, vilem deprendit in illis
 Synthesim, et vulgata satis medicamina risit.
 Bis denum *Rutæ* folium, salis et breve granum,
 Juglandesque duas, totidem cum corpore ficus;
 Hæc oriente die, parco conspersa Lycæo,
 Sumebat, metuens dederat quæ pocula mater.

The ancients were so fond of perfumes, that they scented their persons and garments, their vases, their domestic vessels, and their military insignia. They not only considered aromatic emanations as acceptable to the gods, and therefore used them in their temples, as they are at present by the Roman Catholics, but as announcing the presence of their divinities; and Virgil thus speaks of Venus:

———— Avertens roseâ cervice refulsit,
 Ambrosiæque comæ divinum vertice odorem
 Spiravêre.

Chaplets of roses were invariably worn in festivals and ceremonies; and wines were also aromatised with various odoriferous substances. The Franks and the Gauls continued the same custom; and Gregory of Tours called these artificial-flavoured liquors, *Vina odoramentis immixta*. To this day, the manipulation of French wines gives them a factitious *bouquet*, with raspberries, orris root, and divers drugs, to suit the British market.

No external sense is so intimately connected with the internal senses as that of smell; none so powerful in exciting and removing syncope, or more capable of receiving delicate and delicious

impressions : hence Rousseau has denominated this faculty "*the sense of imagination.*" No sensations can be remembered in so lively a manner as those which are recalled by peculiar odours, which are frequently known to act in a most energetic measure upon our physical and moral propensities. How many perfumes excite a lively feeling of fond regret when reminding us of the beloved one who was wont to select them, and whom we long to meet again ! It is not improbable that our partiality to the hair of those who are dear to us, arises from this circumstance. Every individual emits a peculiar odour ; and, according to Plutarch, Alexander was distinguished by the sweet aroma that he shed. Perhaps the expression, so frequently found in the lives of the saints, 'who die in odour of sanctity,' may be referred to this peculiar gift granted to beatitude.

It has been observed, that animals who possess the most acute smell, have the nasal organs the most extensively developed. The Ethiopians and the American Indians are remarkable for the acuteness of this sense, accounting for the wonderful power of tracking their enemies. But although we may take the peculiar organization of their olfactory organs as being partly the cause of this keen perceptibility, we must in a great measure attribute this perfection to their mode of living. Hunting and war are their chief pursuits,

to which they are trained from their earliest infancy : therefore this perfection may, to a certain extent, be the result of habit ; and the sight and hearing of these wanderers are as singularly perfect as their smelling. Mr. Savage relates, that a New-Zealander heard the report of a distant gun at sea, or perceived a strange sail, when no other man on board could discern it. Pallas, in speaking of the Calmucks, says that many of them can distinguish by smelling at the hole of a fox whether the animal be there or not ; and on their journeys and military expeditions they often smell out a fire or a camp, and thus seek quarters for the night or booty. Olaüs Borrich informs us, that the guides between Smyrna, Aleppo, and Babylon, when traversing the desert, ascertain distances by the smell of the sand. That odours float in the atmospheric air is obvious ; the distance at which they are perceived is incredible. The spicy breezes of Ceylon are distinguished long before the island is seen ; and it is a well-known fact that vessels have been saved by the olfactory acuteness of dogs, who, to use the common expression, were observed to sniff the land that had not been descried. As a proof of the intimate connexion between smell and respiration, when the breath is held, odorous substances are not perceived, and it is only after expiration that they are again recognised. A proof of this may be easily obtained by placing the open neck of a

small phial containing an essential oil in the mouth during the acts of inspiration and subsequent expiration. Willis was the first who observed that, on placing a sapid substance in the mouth, and at the same time closing the nostrils, the sensation of taste is suspended ; and this observation has given rise to the prevailing opinion that smelling and tasting are intimately related. Odour which thus accompanies taste is termed flavour ; and the ingenious Dr. Prout has admirably defined the distinction between taste and flavour, and he considers the latter an intermediate sensation between taste and smell.

The acuteness of the sensation of smelling in animals is such, that in many instances our observations have been deemed fabulous. The distance at which a dog tracks his master is scarcely credible ; and it is strange that the ancients attributed a similar perfection to the goose. Ælian affirms that the philosopher Lycadeus had one of these birds that found him out like a dog :

Humanum longè præsentit odorem

Romulidarum acris servator, candidus anser.

Birds of prey will scent the battle-field at prodigious distances, and they are often seen hovering instinctively over the ground where the conflict is to supply their festival. Humboldt relates, that in Peru, at Quito, and in the province of Popayan, when sportsmen wish to obtain that species of vulture called *vultur gryphus*, they

kill a cow or a horse, and in a short time these sagacious birds crowd to glut their ravenous appetites. Ancient historians assert that vultures have cleft the air one hundred and sixty-six leagues to arrive in time to feast upon a battle; and Pliny boldly affirms that even crows have so acute a sense of approaching corruption, that they can scent approaching death three days before dissolution, and generally pay the *morbond* a visit a day before his time, not to be disappointed. This notion has become a vulgar prejudice, as much so, indeed, as the howling of a dog, which is considered in most countries as foreboding death. In various animals an offensive odour is a protective gift. The *staphylinus olens*, for instance, sheds an effluvium which effectually keeps away the birds who would otherwise pounce upon him. But of all singular perfections in the sense of smelling that were ever recorded, may be cited the monk of Prague and the blind man in the Quinze-vingt Hospital of Paris, who possessed the faculty of ascertaining the presence of virginity whenever a female had the luck of being introduced to them !

These anomalous senses, for such they may be called, are as wonderful as they are inexplicable, and appear to arise from a peculiar sensibility of the organs of smell, which renders them capable of being stimulated in a peculiar manner, that no language can express or define. It

is scent, no doubt, that gives the migratory power to various animals ; “ which enables them,” to use the words of the much lamented Dr. Mason Good, “ to steer from climate to climate, and from coast to coast ; and which, if possessed by man, might perhaps render superfluous the use of the magnet, and considerably infringe upon the science of logarithms ? Whence comes it that the field-fare and red-wing, that pass the summer in Norway, or the wild-duck and merganser, that in like manner summer in the woods and lakes of Lapland, are able to track the pathless void of the atmosphere with the utmost nicety, and arrive on our own coasts uniformly in the beginning of October ?”*

This sense is not limited to migratory animals, as instanced by carrier-pigeons, who have been known not only to carry bags in a straight line from city to city, but traverse the sea with an undeviating flight. Surely this faculty must be attributed to the sense of smell ; it can scarcely be referred to sight or hearing ; although the wonders of the creation are such, that we can no more

* That animals are more frequently guided by the sense of smelling than by sight, is evident in those plants that shed a cadaverous effluvia, especially the *arum dracunculæ* and the *stapelia variegata* of the Cape, which attract various insects that usually deposit their eggs in a stercoraceous or corrupt nidus. Here these insects have been deceived by vision, and imagined in their illusion that they had safely lodged their progeny in carrion.

account for these peculiar attributes refused to the lords of the creation, than for the power of the lobster, who not only can re-produce his claws when deprived of them by accident, but cast them off to extricate himself from the captor's grasp. The *Tipula pectiniformis*, or the daddy long-legs of our infant amusement and amazement, possesses the same renovating faculties. The gluttonous gad-fly may be cut to pieces without any apparent interruption in his meal, when fastened to one's hand: the polype does not seem to be at all discomposed when we turn him inside out; and, when divided into various sections, each portion is endowed with an instinctive and reformative power of multiplying his species in countless numbers! The diversity of our olfactory fancies is as unaccountable, and only illustrates the words of Petronius,

Non omnibus unum est quod placet; hic spinas, colligit ille
rosas.

LOVE PHILTERS AND POTIONS.

It will scarcely be credited, but to this very day the superstitious belief in the power that certain medicinal substances possess of causing a sympathetic fondness, still obtains, even amongst classes of the community whose education one would imagine ought to have rendered such an absurdity revolting. In Italy, Spain, and Portugal, the influence of love powders and aphrodisiac drugs is universally confided in.

The ancients thought that there existed, not only various charms to kindle amorous feelings, but also to check all fond desires. The latter influence they considered as *malefices*, vulgarly called, in more modern times, "point tying." Plato, in his Republic, warns husbands to be on their guard lest their domestic peace might be disturbed by these diabolical practices. Lovers, separated from each other's embrace by these nefarious enchantments, were said to be tied down. Thus Virgil,

Dic, Veneris vincula necto :
Terna tibi hæc primùm triplici diversa colore
Licia circumdo.

No power could release one from these bonds :

Quis neget et magicas nervos torpere per artes ?

By the laws of the twelve tables such enchantments were punished with death ; and Numantina, wife of Plautius Sylvanus, was accused,

Injecisse carminibus et veneficiis vecordiam marito.

When Faustina, the gay bride of Marc Antoninus was rapturously enamoured with an histrionic favourite, she was only cured of her folly by a potion in which some of the comedian's blood had been introduced. Petrarch relates of Charlemagne, that this monarch was so fondly attached to a fair lady, that after her death he carried about her embalmed body in a superb coffin, until a venerable and learned bishop, who very wisely thought that a living beauty was preferable to the remains of a departed one, rebuked his sovereign for his irreligious and unnatural propensities, and revealed to him the important secret of his love arising from a charm that lay under the dead woman's tongue. Whereupon the bishop went to the corpse, and drew from it a ring, which the emperor had scarcely looked upon when he abhorred the former object of his attachment, and felt such an extraordinary fancy for the bishop that he could not dispense with his presence for a single moment, until the good prelate was so obsessed with royal favour that he cast the ring into a lake. From that moment Charlemagne (his historian continues) " neglected

all public business, and went to live in the middle of a fen in the vicinity of Aix, where he built a temple, near which he was finally buried."

St. Jerome, in the Life of Hilarius, mentions a young man who so bephiltered a maiden that she fell desperately in love with him; and Sigismundus Schereczius, in his chapter *De Hirco Nocturno*, affirms that "unchaste women, by the help of these witches, the devil's kitchen-maids, have their lovers brought to them during the night, and carried back again, by a phantom flying in the air in the likeness of a goat." "I have heard," he adds, "divers confess that they have been so carried on a goat's back to their sweet-hearts many miles in a night." These wonderful potions were made of strange ingredients, for amongst them we find a man's blood chemically prepared, mandrake roots, dead men's clothes, candles, a certain hair in a wolf's tail, a swallow's heart, dust of a dove's heart, tongues of vipers, brains of a jackass, pebbles found in an eagle's nest, together with "*palliola quibus infantes obvoluti nascuntur, funis strangulati hominis*," &c. &c. &c. Cleghorn, in his History of Minorca, tells us that water in which a hedgehog has been allowed to run into corruption, was supposed to be possessed of similar exciting powers; and a pulverised bit of a caul, scrapings of nails, and chopped hair, are to this hour deemed equally effectual to obtain these desirable ends.

Notwithstanding all these absurdities, it is undoubtedly true that certain articles of food have been considered as endowed with aphrodisiac properties; fish of various kinds, the mollusca and testaceous animals more especially. Juvenal attributes this quality to oysters, which, in this respect, with cockles and muscles, have become vulgarly proverbial:

Grandia quæ mediis jam noctibus ostrea mordet.

Wallich informs us that the ladies of his time had recourse on such occasions to the brains of the *mustela piscis*. The *sepia octopus* was also in great repute; and Plautus, in his *Casina*, brings on an old man who has just been purchasing some in the market. There is reason to believe that these ideas were not altogether as absurd as they may appear. Fourcroy and Vauquelin have attributed this influence to the presence of phosphorus, which is well known to be highly exciting. In the East, various vegetable productions are considered in the same light. Their *hakims* have numerous receipts for the purpose; amongst which we find several electuaries,—such as the *diacyminum*, the *diaxyllaloes*, the confections of *Luffa Abu-nafa*, and the *chaschab abusidan* of the Arabians, of which wonderful effects are related.

The laws of every country have provided against the offence of witchcraft, sorcery, conjuration, and enchantment. We find a statute of our first James, making it “felony, without be-

nefit of the clergy, under the penalty of death, the act of all persons invoking any evil spirit, or consulting, covenanting with, entertaining, employing, feeding, or rewarding any evil spirits; or taking up dead bodies from their graves, to be used in any witchcraft, sorcery, charm, or enchantment; or killing, or otherwise hurting, any person by such infernal arts. And if any person should attempt by sorcery to discover hidden treasures, or to restore stolen goods, or to *provoke unlawful love*, (lawful love did not come within these salutary provisions,) he or she should suffer imprisonment and pillory for the first offence, and death for the second." Strange to say, that act continued in force till very lately; and Blackstone observes, "that many poor wretches were sacrificed thereby to the prejudice of their neighbours, and their own illusions; not a few having, by some means or other, confessed the fact at the gallows."

Nothing could be more absurd, nay atrocious, than the means judicially resorted to at that period to detect witchcraft. Sir Robert Filmer mentions two tests by fire: the first by burning the house of the pretended witch; the other, by burning any animal supposed to have been bewitched by her. In both these cases the witch would confess her *malefices*!

Moreover, it was asserted that a witch, even while enduring the pangs of torture, could only

shed *three tears*, and those from the *left eye*; this was considered a sufficient proof of guilt by the judges of the day! Swimming a witch was another expedient; in this ordeal the hag was stripped naked, and cross-bound, the right thumb to the left toe, and *vice versâ*. Thus prepared, she was thrown into a pond or a river; in which, if guilty, she could not sink, for having by her compact with the Devil renounced the waters of baptism, the waters in return refused to receive her in their bosom.

Our wise legislators maintained that old women were generally selected by the evil ones for their malicious purposes, and they usually appeared to them in the form of a man wearing a black coat or gown; and sometimes, especially in the north, with a bluish band and turned-up linen cuffs: hard bargains were sometimes driven between the parties for the value of the harri-dan's soul. This was also the case, according to Echard, in the negociation between Oliver Cromwell and the Devil before the battle of Worcester. There were black, white, and grey witches: some of them fond of junketing and merry-making, and often would Satan play on a pipe or a cittern to make them dance; and not unfrequently would he become enamoured with their withered charms, when toads and horrible serpents were the hated progeny of this unhallowed union. Sinclair tells us, in his "Invi-

sible World," of one Mr. Barton, who was burnt with his wife for witchcraft, and who confessed, before he was tied to the stake, that he had intrigued with the Devil in the shape of a comely lady, who had given him 15*l.* for his trouble. His wife confessed at the same time, that the Devil in the shape of a poodle-dog used to dance before her, playing upon the pipes with a candle under his tail. The Devil, particularly in Scotland, would ever and anon get up into a pulpit, and preach a sermon in a voice *hough* and *gustie*.

Burton gives us some curious traditions of these devilish amours, and quotes Philostratus's account of one Menippus Lycius, a young man twenty-five years of age, who, going between Cenchreas and Corinth, met a phantom in the shape of a fair gentlewoman, which, taking him by the hand, carried him to her house in the suburbs of Corinth; and told him she was a Phœnician by birth, and, if he would tarry with her, he should hear her sing and play, and drink such wine as never was drunk, and no man should molest him, but she, being fair and lovely, would live and die with him. The young man tarried with her awhile to his great content, and at last married her; to whose wedding, amongst other guests, came Apollonius; who, by some probable conjecture, found her out to be a serpent—a lamia. When she saw herself discovered, she wept, and desired Apollonius to be silent; but

he would not be moved, and thereupon she, plate, house, and all that was in it, vanished in an instant.

Florigerus also mentions the case of a young gentleman of Rome, "who on his wedding day went out walking with his bride and some friends after dinner; and towards evening went to a tennis-court, and while he played, he took off his ring, and placed it upon the finger of a brass *Venus statua*. The game finished, he went to fetch his ring; but Venus had bent her finger upon it, and he could not get it off. Whereupon, loth to make his companions tarry, he there left it, intending to fetch it the next day, went thence to supper, and so to bed; but in the night Venus had slipped between him and his wife, and thus troubled him for several successive nights. Not knowing how to help himself, he made his moan to one Palumbus, a learned magician; who gave him a letter, and bade him at such a time of the night, in such a cross way, where old Saturn would pass by with his associates, to deliver to him the script: the young man, of a bold spirit, accordingly did it; and when the old fiend had read it, he called Venus to him, who was riding before him, and commanded her to deliver the ring, which forthwith she did."

Burton further quotes St. Augustine, Bodin, Paracelsus, and various other learned men, who firmly maintain that the Devil is particularly

fond of a little flirtation with the ladies; and a Bavarian widower, who was sadly grieving for his beloved wife, was visited by Old Nick, who had assumed the form of the departed lady, and promised to live with him and comfort him on the condition that he would leave off swearing and blaspheming: he vowed it, married her, and she brought him several children; till one day, in an uxorious quarrel, he began to swear like a Pandour, whereupon she vanished, and never more was seen.

The preservatives against witchcraft were as absurd as the fear it inspired: some hair, parings of nails, or any part of a person bewitched, were put into a stone bottle, with crooked nails, then corked close, and hung up the chimney; this expedient occasioned most horrible tortures to the witch, until the bottle was uncorked. Witches, moreover, cannot pursue their victims beyond the middle of a running stream, provided the fugitives had been baptized.

By an act of George II. these offences were considered as misdemeanors, and punished with a year's imprisonment, and standing four times in the pillory. There is no doubt that, notwithstanding the absurdity of such delusions and impostures, legislators must endeavour to secure the ignorant against these impositions, which are frequently of a perilous nature, and have been often known to occasion serious accidents,

and even death. Many of the substances thus administered are of a most dangerous description, and these enchantments are not unfrequently resorted to with sinister intentions. It is related of the Asiatic women, that, under the pretext of giving these philters, they sometimes prepare a beverage from the seeds of the *Datura Metel*, which produces a lethargic stupefaction of a convenient nature. The mischief that has frequently arisen from the exhibition of the *Lytta vesicatoria* has been observed and recorded by every medical practitioner. The *Diablotini*, a kind of incentive sugar-plums of the Italians, have been known to occasion the most serious accidents; and the celebrated French actor Molé lost his life in one of these experiments. Yet penal enactments, in such cases, must be resorted to with much circumspection; for prohibition too frequently promotes the evils which it is designed to check.

Montesquieu observes, that the ridiculous stories that are generally told, and the many impositions that have been discovered in all ages, are enough to demolish all faith in such a dubious crime, if the contrary evidence were not also extremely strong. Unquestionably, we have too many instances of criminal acts of superstition in which supernatural agency is believed; but does this philosophic writer mean to say that we have evidence of actual witchcraft and sorcery? It is with some degree of regret that we find our

learned Blackstone avow his belief in these matters, and we borrow his own words on the subject: "To deny the possibility, nay, the actual existence of witchcraft and sorcery, is at once flatly to contradict the revealed Word of God in various passages both of the New and Old Testament; and the thing itself is a truth to which every nation in the world hath in its turn borne testimony, either by examples seemingly well attested, or by prohibitory laws which at least suppose the possibility of a commerce with evil spirits. The civil law punishes with death not only the sorcerers themselves, but also those who consult them; imitating in the former the express law of God, 'Thou shalt not suffer a witch to live!'" Without calling into doubt the records of supernatural agency in Holy Writ, evident manifestations of the power and the will of the Divinity at that period, it may fairly be asked—Can we promulgate such opinions in the present times, when miraculous events do not seem to be permitted by our Creator in His inscrutable wisdom, without incurring the risk of plunging the ignorant in all the dark horrors of the early ages? Montesquieu himself has justly remarked, "that the most unexceptionable conduct, the purest morals, and the constant practice of every duty in life, are not a sufficient security against the suspicion of crimes like these." And yet, because, forsooth, there may be made to appear *examples seemingly*

attested, and that on the faith of such an attestation the most absurd and cruel *prohibitory laws* have been enacted by every *nation in the world*, on the supposition of the possibility of such a crime, however ignorant and brutalized by superstition these nations are or may have been, man is not only authorised by the Scriptures to persecute some poor miserable fool or vagrant imposter unto death, but he is sanctioned in founding this barbarous persecution on the laws of God! The mind sickens at such doctrines. It is grievous to find a man like our Addison sharing in such preposterous notions; notions which would induce a doubtful by-stander not to interfere with a mob of miscreants who were drowning some unfortunate old woman "for a witch."

"There are," says Addison, "some opinions in which a man should stand *neuter*, without engaging his assent to one side or the other. It is with this temper of mind that I consider the subject of witchcraft. When I consider whether there are such persons in the world as those we call witches, my mind is divided between the two opposite opinions; or rather, to speak my thoughts freely, I believe in general that *there is*, and has been, such a thing as witchcraft, but, at the same time, can give no credit to any particular instance of it."

Are we then still to believe that there may exist some supernatural hag, that can

———Untie the winds, and let them fight
Against the churches———
Control the moon, make ebbs and flows,
And deal in her command without her power?

or who, with the influence given to them by our
poet Rowe,

By force of potent spells, of bloody characters,
And conjurations horrible to hear,
Call fiends and spectres from the yawning deep,
And set the ministers of hell to work,

with the liver of a blaspheming Jew, the nose of a Turk, the lips of a Tartar, the finger of a birth-strangled babe, and ditch-delivered by a drab, &c. &c.? If we are to believe in witches with Blackstone and Addison, we must give credence to all these mystic means by which they *work* their *way*. All these *means* have been *seemingly attested*, and led, from the just horror they inspired, to those *prohibitory laws* enacted by *every nation*; as if the laws of man could be of any avail in resisting the *admitted* supernatural powers with which these witches, sorcerers, magicians, &c. must have been invested by the Deity to perform their terrific operations! If we deny this authority we are Manicheans.

VENTRILOQUISM.

THIS peculiar faculty was well known to the ancients. Hippocrates verily believed that there did exist individuals who could draw a voice from their belly. He speaks of the wife of Polimarchus, who, being affected with a quinsy, spoke in this manner ; hence this power was called *Engastrimysm*. Plato gives the history of Euricles, who mentions three persons whom St. Chrysostom and Œcumenius considered to be endowed with a heavenly gift. Cælius Rhodiginus describes an old woman of Rovigo who used to deliver her oracles in the like manner, and who was never so eloquent as when stripped to the skin, when she would answer most accurately all the questions put to her by a familiar who attended upon her, and was called Cincinnatulus. Anthony Vandael, a physician of Harlem, considered ventriloquism as a supernatural power, enabling the voice to proceed “ *ex ventre inferiore et partibus genitalibus ;*” and he describes a woman of seventy-three years of age, called Barbara Jacobi, who used to ventriloquise with an imp of the name of Joachim, who would weep most piteously, or fall into roars of

laughter, and sometimes danced and sung with remarkable grace and elegance, according to the depressing or the exhilarating nature of Mrs. Jacob's communications. In the Septuagint the Hebrew word *Ob* is rendered by *Engastrimythos*; and it was supposed that the Pythoness who evoked Samuel had recourse to this power. Oleaster, Grand Inquisitor of Portugal, in a work published at Lisbon in 1656, mentions a woman of the name of Cecilia who was brought before the court, and expressed herself in a ventriloquial voice, which she said was that of one Peter John, who had been dead for many years; but Peter John pleaded in vain for his hostess, for, despite his abdominal eloquence, she was sentenced to be transported. Whether Peter John accompanied her in exile is not stated. In 1643, Dickinson mentions a man at Oxford, who was called the King's Whisperer, and who expressed himself most clearly without opening the mouth or moving the lips. This faculty has frequently been employed in various speculations. In the sixteenth century, Borden relates the story of a valet of Francis I, named Brabant, who persuaded the mother of a young girl he courted to grant her consent to their marriage as speedily as possible, if she wished her husband's soul to get out of the torments of purgatory: after marriage, however, he was disappointed in his pecuniary expectations, and he applied his powers of ventriloquism to ter-

rify a rich banker of Lyons, of the name of Corner, to bestow a fortune upon his wife ; for which purpose he assumed the voice of Corner's father, who supplicated him to give the money as the only means of sending his poor consuming soul to paradise.

One of the most celebrated ventriloquists was a grocer of St. Germain's, one St. Gilles ; but he applied the faculty he possessed to benevolent purposes. Being called to reclaim a newly-married young man from a disgraceful connexion, which rendered his wife most unhappy, his supernatural voice, supposed to come from heaven, succeeded ; and he was equally fortunate in bringing to a sense of propriety one of the most sordid misers of his time.

St. Gilles was not so felicitous in a trick he played to some monks, vainly attempting to prove the absurdity of their superstitious notions. One of the community had lately died, and, according to custom, the deceased was laid out in the church, and his brethren, grouped around him, were pouring forth prayers for the repose of his soul, when St. Gilles, throwing his voice into the coffin, returned them all the thanks of the departed friar for their supplications in his behalf. The astonished monks were most edified at this miraculous event ; and their prior, who knew St. Gilles to be a freethinker, endeavoured to impress upon his mind the wonder that he

himself had performed, and to inveigh most earnestly against the impiety and incredulity of modern philosophers, who entertained sceptic ideas concerning miracles. After a long exhortation, our ventriloquist burst into a fit of laughter, and avowed the deception he had practised: to convince the brotherhood of the veracity of his assertion, he gave them various specimens of his skill,—but to no purpose; he was called an infidel, a scoffer, an atheist, and, had it been in Spain, the stake would in all probability have rewarded his perilous frolic, or his stiff-necked impiety in refusing to believe in his own miracles.

It is now pretty generally admitted that ventriloquism simply consists in a slow and gradual expiration, preceded by a strong and deep inspiration, by which a considerable quantity of air is introduced into the lungs, which is afterwards acted upon by the flexible powers of the larynx and the trachea: any person therefore, by practice, can obtain more or less expertness in this exercise; in which, although not apparently, the voice is still modified by the mouth and the tongue. Mr. Lespagnol, in a very able dissertation on this subject, has demonstrated that ventriloquists have acquired by practice the power of exercising the veil of the palate in such a manner, that, by raising or depressing it, they dilate or contract the inner nostrils. If they are closely contracted, the sound produced is weak, dull, and

seems to be more or less distant; if, on the contrary, these cavities are widely dilated, the sound is strengthened by these tortuous infractuositities, and the voice becomes loud, sonorous, and apparently close to us. Thus any able mimic who can with facility disguise his voice, with the aid of this power of modifying sounds, may in time become a ventriloquist.

CHAUCER'S DESCRIPTION OF A PHYSICIAN.

THE DOCTOR OF PHYSIC.

WITH us there was a doctour of phisike ;
 In all this world, ne was there none him like
 To speake of phisike and of surgerie,
 For he was grounded in astronomie.
 He kept his patient a full great dell
 In houses ; by his magike naturell
 Well couth he fortune the assendent
 Of his image for his pacient.
 He knew the cause of every malady,
 Whether it were of cold, heate, moist, or dry,
 And whereof engendered was each humour.
 He was a very parfit practisour ;
 The cause I knew, and of his haim the roote,
 Anon he gave to the rich man his boot.
 Full ready had he his apoticaries
 To send him drugges and his lectuaries ;
 For each of them made othel for to winne,
 Ther friendship was not new to beginne.
 Well he knew the old Esculapius,
 And Dioscorides, and eke Ruffus,
 And Hippocrates, and Galen,
 Serapion, Rasis, and Avicen,
 Aberrois, Damascene, and Constantin,
 Bernard, Galisden, and Gilbertin.
 Of his diet measurable was he,
 For it was of no superfluitie ;
 But of great nourishing and digestible.
 His study was but little on the Bible.

In sanguine and in percepolad withall
 Lined with taffata and with sendall ;
 And yet he was but easy of dispenche.
 He kept that he won in time of pestilence ;
 For gold in phisike is a cordial,
 Therefore he loved gold speciall.

It appears from this quaint and satirical picture, that, in our Chaucer's days, astrology formed part of a physician's study. It also plainly proves that a disgraceful collusion prevailed between medical practitioners and their apothecaries, mutually to enrich each other at the expense of the patient's purse and constitution. The poet, moreover, seems to tax the faculty with irreligion : that unjust accusation was not uncommon ; hence the old adage, "*Ubi tres medici, duo athei.*" To the disgrace of many illiberal persons of the present age, we have known our most able and praiseworthy physiologists charged with materialism.

DÆMONOMANIA.

THIS disease is perhaps the most distressing species of insanity ; since, with the exception of the miserable belief of being possessed by the evil spirit, the patient is often in full possession of his other faculties, and will even endeavour to reason with his attendants, with some apparent plausibility, on the very aberration that constitutes the malady.

The word ‘dæmon’ among the ancients was not considered as specific of an evil spirit ; on the contrary, it signified genius, intellect, mind. Δαιμόνιον, from δαίμων, meant wisdom, science. The first notions of dæmons were probably brought from Chaldea, whence they spread amongst the Persians, Egyptians, and Greeks. Gales maintains that the original institution of dæmons was an imitation of the Messiah. The Phœnicians called them *Baalim*. So far do these early opinions prevail, that among the Anabaptists we find a sect called Dæmoniac, who believe that devils shall be saved at the end of the world.

Plato gave the name of dæmons to the benevolent spirits who regulated the universe. The Chal-

deans and Jews considered them as the causes of all human maladies. Saul was agitated by an evil spirit, and Job and Joram suffered under a similar visitation.

Dæmonomania differs widely from the mental disease called Theomania. In the latter state of insanity the patient fancies that he is placed in communication with the Deity or his angels; in the former, he feels convinced that he has become the prey of the destroyer of mankind.

Under the head of "Unlawful Cures," instances are related of the firm belief in the power of evil spirits to cause various diseases. Perhaps the origin of dæmonomania may be traced to fanatical persecution; never was the malady so common as during the denunciations of Calvin, when torture was frequently resorted to, to make the victims of bigotry renounce a supposed pact with the devil. D'Agessau was right when, in advising the parliament of Paris to repeal all statutes against sorcery, he recommended that dæmoniaks should be handed over to the physician, instead of the priest or the executioner.

The sufferings which dæmoniaks say they endure must be excruciating; so powerful is moral influence over our physical sensations. They will tell you that the devil is drawing them tight, and suffocating them with a cord; that he is pinching and lacerating their entrails, burning and tearing their heart, pouring hot oil or molten lead in their

veins, while internal flames are consuming them. Their strength exhausted, their digestive functions impaired, their appearance soon becomes miserable in the extreme, their countenances pale and haggard: the wretched creatures endeavour to conceal themselves in their scanty meals, or their attempts to enjoy a broken slumber; they are persuaded that they no longer possess a corporeal existence that requires refection or repose,—the evil spirit has borne away their bodies, the devil requires no earthly support; they even deny their sex: they are doomed to live for ever in constant agony. These unfortunate creatures are mostly women. One of them asserts, with horrid imprecations, that she has been the devil's wife for a million of years, and had borne him a numerous family; her body is nothing but a sack made of a devil's skin, and filled with their offsprings in the shape of devouring snakes, toads, and venomous reptiles. She exclaims that her husband constantly urges her to commit murder, theft, and every imaginable crime; and sometimes with bitter tears supplicates her keeper to put on a strait waistcoat, to prevent her from doing evil. Another woman, forty-eight years of age, assures us that she has two devils who have taken up their residence in both her hips, and have grown up to her ears: one of them is black and yellow, the other black, both in the shape of cats. She fills her ears with snuff and grease to satisfy their diabolical cravings. She

eats with voracity, but is a perfect skeleton in appearance ; the devils consume all, and leave her nothing. They constantly bid her to go and drown herself ; but she cannot obey them, since eternity is her doom. They are scarcely sensible of painful agents, and are unconscious of heat, cold, or the inclemency of the weather. Their perspiration, frequently profuse, exhales a most unpleasant odour ; hence the vulgar fancy that they smell of the lower regions. This circumstance is the usual consequence of many nervous affections, and arises, most probably, from the foulness of the breath, a natural result of impaired digestion, and from a peculiar acrimony of the cutaneous secretions.

It has been generally remarked that cases of dæmonomania are more common amongst women than in men. Their greater susceptibility to nervous affections, their warmth of imagination and strong passions, which habit and education compel them to restrain, produce a state of concentration that must cause increased excitement, and render them more liable to those terrific impressions that constitute the disease. These terrors, from false notions of the Deity, make them anticipate in this world the sufferings denounced in the next. One woman has been known to become dæmonomaniac after an intense perusal of the Apocalypse, and another by the constant reading of the works of Thomas à Kempis. Women, moreover, at certain

critical periods are subject to great mental depression, which they have not the power to relieve by exciting pursuits, like men. Melancholy succeeds a dull sameness. Religion, viewed in a false light, becomes her refuge; more especially at an advanced period of life, when loss of youth and beauty is bitterly felt, as galled vanity compares the present with the past. Hysteric symptoms are now developed: the passions, which are too frequently increased even to intensity, rather than cooled, by years, prompt her to rebellious thoughts that religion and virtuous feelings strive to restrain; and these powerful agents, acting upon a predisposition morbidly impressionable from ignorance or the errors of education, accelerate the invasion of this cruel malady.

Pliny tells us that women are the best subjects for magical experiments; Quintilian is of the same opinion: Saul consults a witch; Bodin, in his calculations, estimates the proportion between wizards and witches as one to fifty. It is, perhaps, owing to these remarks that many ungenerous writers have denied *women* a soul, as not belonging to *mankind*. There exists a curious anonymous work, published at the close of the sixteenth century, to prove that women are not men, or, in other words, reasonable creatures, and entitled “*Dissertatio perjucunda quâ Anonymus probare nititur Mulieres homines non esse.*” Our author upon this principle endeavours to show

that women cannot be saved. One Simon Geddicus, a Lutheran divine, wrote a serious confutation of this libel upon the fair sex, in 1595, and promises the ladies an expectation of salvation on their good behaviour. According to a popular tradition among the Mahometans, women are excluded from paradise: St. Augustin, however, calls them the *devout sex*; and in the prayer to the Virgin of the Romish Church we find “*Intercede pro devoto fæmineo sexu.*” An hypothesis still more absurd was broached by a Doctor Almaricus, a theological Parisian writer of the twelfth century, who advanced that, had it not been for the original sin, every individual of our species would have come into existence a complete man; and that God would have created them by himself, as he created Adam. Our worthy doctor was a disciple of Aristotle, who maintained that woman was a defective animal, and her generation purely fortuitous and foreign to nature. Howbeit, my fair readers will learn with satisfaction that the doctrines of this aforesaid Almaricus were condemned by the church as heretical, and his bones were therefore dug up, and cast into a common sewer, as an *amende honorable* to the offended ladies.

“A woman,” says one of the primitive fathers of the church, “went to the play, and came back with the devil in her; whereupon, when the unclean spirit was urged and threatened, in the

office of exorcising, for having dared to attack one of the faithful, 'I have done nothing,' replied he, 'but what is very fair; I found her on my own grounds, and I took possession of her.'"

St. Cyprian informs us, that when he was studying magic, he was particularly intimate with the devil. "I saw the devil himself," he says; "embraced him; I conversed with him, and was esteemed one of those who held a principal rank about him." Who can doubt the assertion of a saint! It appears, that in those wonderful days the devil usually wore a black gown, with a black hat; and it was observed that, whenever he was preaching, his *glutei muscles* were as cold as ice.

At all times satire has endeavoured to make invidious distinctions between the sexes: this is not fair. Women are generally what men have made them. In a physical, and, consequently, to a certain degree in a moral point of view, their organization is essentially different from ours; therefore, a masculine woman is as intolerable as an effeminate man. The education of females tends in a great measure to increase that susceptibility to trifling excitements, which in after-life urges them to the extremes of good or evil. While the toys and amusements of boys are of a manly nature, a girl is taught to practise upon her darling doll all the arts which a few years after she will practise upon herself. Many in-

telligent writers have doubted the expediency of giving woman any education beyond the sphere of her domestic pursuits and occupations ; Erasmus wrote largely on this subject to Budæus. Vives treats of it in his *Institutio fœminæ Christianæ* ; and a German authoress, Madame Schurman, has published a treatise on the problem, “ *Num fœminæ Christianæ conveniat studium literarum ?* ”

It is this nervous flexibility in women that exposes them to that constant succession of emotions which are expressed by a rapid transition from tears to smiles ; and, anomalous as it may appear, they are more exposed to fond impressions in their grief than at any other moment ; they then feel more helpless, and stand in greater need of consolation. The story of the Matron of Ephesus is not so great a libel on the sex as one might imagine. Their mind is prone to romantic enthusiasm ; they delight in the extraordinary, the terrible, and as Madame de Sevigné, who well knew her sex, expresses it, they enjoy in chivalric tales *les grands coups d'épée*. Prudence preventing them too frequently from expressing their thoughts, thinking becomes more intense ; and Publius Syrus has said, “ *Mulier quæ sola cogitat, malè cogitat :* ” but when the suppressed volcano bursts forth, its eruptions are boundless ; it is then that one may exclaim, “ *Notumque fuerit quid fœmina possit.* ” No passion is more over-

whelming than when it has been kept down by dissimulation ; opportunity is their curse : Montaigne has too truly said, "*Oh le furieux avantage que l'opportunité !*" and our Denham has beautifully illustrated its fearful circumstances :

Opportunity, like a sudden gust,
Hath swell'd my calmer thoughts into a tempest.
Accursed opportunity !
That works our thoughts into desires ; desires
To resolutions ; those being ripe and quicken'd,
Thou giv'st them birth, and bring'st them forth to action.

It is a perilous ordeal for such to whom the lines of Ovid might apply,

Quæ, quia non liceat, non facit ; illa facit.

To what prejudice against women are we to trace their sex having been chosen to represent the Furies, stern and inexorable ministers of Divine wrath ; the Harpies, who defiled all they touched ; the perilous Syrens ; unless it be to woman's fascinations in youth, and envious bitterness in old age — the conventional type of witchcraft ? This unhappy selection of woman for working *malefices* has been attributed to the facility which the devil found in tempting Eve. A witch is supposed by the most learned in the black art to be in compact with Satan, whom she is obliged to obey ; whereas a sorcerer commands the devil himself by his knowledge of charms and invocations, but more especially of perfumes that the evil spirits delight in when properly suffu-

migated, or abhor when maliciously given them to smell. Thus the burning of a fish's liver by Tobit drove the devil into the remote parts of Egypt; and Lilly informs us, that one Evans having raised a spirit at the request of Lord Bothwell and Sir Kenelm Digby, and forgotten his favourite fumigation or incense, the angry elf whipped him up, and carried him from his house in the Minories to Battersea Causeway.

Although fairies are mostly considered juvenile, and many of their kind acts are recorded, yet are they in general mischievous imps; Mr. Lewis describes those he saw in the silver and lead mines of Wales, as only being about half a yard high. As a punishment for their vagaries, all their children are stunted and idiotic; and this accounts for their abominable custom of substituting their own "base elfin breed" for healthy infants. Hence are idiots commonly called changelings.

Dæmoniacs are prone to commit suicide, less from their loathing an irksome life than through fear, not of future torments, but of the renewal or the continuance of their worldly sufferings. Perhaps they may entertain some doubts as to the punishment of another existence, while their actual condition is intolerable; we not unfrequently see desperate men rushing to meet the very fate they dread.

Dæmonomania may be referred to a false view of

divine justice,—ignorance, and consequent weakness of intellect,—and a pusillanimous apprehension of perhaps a merited chastisement. It is a disease which seldom admits of a cure. If the consolations of true religion are proffered, they are either spurned with anger, or merely produce an evanescent melioration. Zacutus relates the case of a dæmoniac who was cured by a person who appeared to her in the form of an angel, to inform her that her sins had been forgiven : it is possible that stratagems of a similar nature might prevail. I attended a monomaniac lady in Paris, who fancied herself in Jerusalem on the eve of its destruction. She furiously opposed all endeavours to move her from her residence ; and it was only by personating a Jewish rabbi, and offering to take her to New Jerusalem as a place of refuge, that she consented to accompany me in a carriage to a *maison de santé* near the capital. Here imagination subdued imagination. I have had the pleasure to hear that ever since I thus succeeded in breaking a link in the morbid association of her fancies, her state of mind rapidly improved, and that she is now restored to perfect sanity.

Dæmonomania has been known to be epidemic. From 1552 to 1554 no less than eighty-four persons became possessed in Rome. The endeavours of a French monk to exorcise them proved of no avail ; and as most of the unfortunate victims of credulity were Jewesses who had consented to be baptized,

the Jews were of course accused of sorcery. About the same period a similar disease broke out in a convent near Kerndrop, in Germany, when all the nuns were possessed, and denounced their cook, who, having confessed that she was a witch, was duly burnt alive with her mother.

Dæmonomania has been considered a hereditary visitation, and whole families have therefore been deemed in pact with the evil one. Insanity is unfortunately known to attach itself to certain generations; but perhaps it has not been sufficiently observed, when endeavouring to account for this melancholy fact, that the mind becomes gradually influenced by the nature of the constant conversation we daily and hourly are exposed to hear; and it is not impossible but that this transmission of mental disease may be attributed to morbid moral and physical sympathies, which might be avoided by withdrawing the persons exposed to it from the sphere of their action. Constant anxious thoughts and painful reflections tend to produce an increased sensorial power in the brain, with a diminished sensibility to external impressions. So great has been this effect upon the senses, that maniacs have been seen to gaze upon the meridian sun without any sensible effect on the organs of vision. It is therefore possible that an individual who beholds with incessant horror insanity in his family, or who constantly hears of their aberrations, may ultimately experience a similar peculiarity of the

mind : hence wit as well as madness have been known to be the heir-looms of a race. Although the examples of vice, one might imagine, would inspire a love for virtuous actions, yet we daily see profligacy the characteristic of an entire family ; and there are names which have been rendered by misconduct synonymous with depravity. This sad fact can only be attributed to natural temperament, whether it be sanguine or melancholic. It has been observed that our constitutions exercise a control over diseases, that modifies them in a peculiar manner. The more acute the sensibility, the greater is the predisposition to insanity. Warm and ungovernable passions will drive one female into all the horrid excesses of nymphomania, while the timid hypochondriac and hysteric woman will gradually sink into a morose or a malevolent despondency. Burton attributes dæmonomania to other causes, and tells us that the devil is so cunning that he is able to deceive the very elect ; and, to compel them the more to stand in awe of him, he sends and cures diseases, disquiets their minds, torments and terrifies their souls, to make them adore him ; and all his study, all his endeavour, is to divert them from true religion to superstition ; and because he is damned himself, and is in error, he would have all the world participate of his errors, and be damned with him.

Amongst the various motives that induced the evil one to pay his sinister visits to frail mor-

talities, that of inflicting upon them a salutary, or a vexatious fustigation, is frequently recorded by the fathers and other writers. It was more especially upon the backs of saints that this castigation took place. St. Athanasius informs us that St. Anthony was frequently flagellated by the devil. St. Jerome states that St. Hilarius was often whipped in a similar manner; and he calls the devil "a wanton gladiator," and thus describes his mode of punishment: "*Insidet dorso ejus festivus gladiator; et latera calcibus, cervicem flagello verberans.*" Grimlaicus, a learned divine, confirms the fact in the following passage: "*Nonnumquam autem et apertâ impugnatione grassantes, dæmones humana corpora verberant, sicut B. Antonio fecerant.*" St. Francis of Assisa received a dreadful flogging from the devil the very first night he came to Rome, which caused him to quit that city forthwith. Abbé Boileau's remarks on this circumstance savour not a little of impiety and free-thinking, for he says, "It is not unlikely that, having met with a colder reception than he judged his sanctity entitled him to, he thought proper to decamp immediately, and when he returned to his convent told the above story to his brother monks." Howbeit, Abbé Boileau is no authority, and it is to be feared that, partaking of the satirical disposition of his brother, he sacrificed piety to wit; for it is well known, be-

yond the power of sceptic doubts, that the afore-said saint's assertion cannot possibly be impugned by proper believers. His power over the fiery elements was established ; whereby he possessed the faculty of curing erysipelas, honoured by the appellation of St. Anthony's fire. In the like manner St. Hubert cured hydrophobia, and St. John the epilepsy.

It is, however, pleasing to know that it was not always that the beatified succumbed to these Satanic pranks, and many instances are recorded of the devils being worsted in their sacrilegious amusement, as fully appears in the history of the blessed Cornelia Juliana, in whose room, one day, says her history, "the other nuns heard a prodigious noise, which turned out to be a strife she had had with the devil, whom, after having laid hold of him, she fustigated most unmercifully ; then, having him upon the ground, she trampled upon him with her foot, and ridiculed him in the most bitter manner (*lacerabat sarcasmis*).” This occurrence is incontrovertible, being affirmed by that learned and pious Jesuit, Bartholomew Fisen.

This partiality of devils for flagellation can most probably be attributed to their horribly jealous disposition ; for it is well known that the saints took great delight in fustigating, not only those who offended them, but their most faithful votaries. Flagellation was, therefore, the

most grateful punishment that could be inflicted to propitiate the beatified; and we have several well-authenticated facts which prove that the Virgin was frequently appeased by this practice. Under the pontificate of Sextus IV, a heterodox professor of divinity, who had written against the tabernacle, was flogged publicly by a pious monk, to the great edification of the by-standers, more particularly the ladies. The description of this operation would lose materially by translation, I therefore give it in the original. “*Apprehendens ipsum revolvit super ejus genua; erat enim valdè fortis. Elevatis itaque pannis, quia ille minister contra sanctum Dei tabernaculum locutus fuerat, cœpit cum palmis percutere super quadrata tabernacula quæ erant nuda, non enim habebat femoralia vel antiphonam; et quia ipse infamare voluerat beatam Virginem, allegando forsitan Aristotelem in libro priorum, iste prædicator illum confutavit legendo in libro ejus posteriorum: de hoc autem omnes qui aderant gaudebant. Tunc exclamavit quædam devota mulier, dicens, ‘Domine Prædicator, detis ei alios quatuor palmatus pro me;’ et alia postmodum dixit, ‘Detis ei etiam quatuor;’ sicque multæ aliæ rogabant, ita quòd, si illarum petitionibus satisfacere voluisset, per totum diem aliud facere non potuisset.”*

We need not seek for similar instances of the mighty power of proper fustigation in foreign parts. The Annals of Wales record a singular

instance of the kind, which happened in the year 1188, as related by Sylvester Gerald, in such a circumstantial manner that the most obdurate incredulity alone could doubt the fact:—"On the other side of the river Humber," he says, "in the parish of Hoëden, lived the rector of that church with his concubine. This concubine, one day, sat rather imprudently on the tomb of St. Osanna, sister to King Osred, which was made of wood, and raised above the ground in the shape of a seat: when she attempted to rise from that place, she stuck to the wood in such a manner that she could not be parted from it, till, in the presence of the people who flocked to see her, she had suffered her clothes to be torn from her, and had received a severe discipline on her naked body, and that too to a great effusion of blood, and with many tears and devout supplications on her part; which done, and after she had engaged to submit to further penitence, she was divinely released."

In this instance, as in many others, freedom from vulgar habiliments appears to have been considered as acceptable to Heaven; so much so, indeed, that the state of greater or lesser nudity has been commensurate with the degree of the offence. The Cynic philosophers of Greece, among whom Diogenes made himself most conspicuous, used to appear in public without a rag upon them. The Indian wise men, called Gym-

nosophists, or naked sages, indulged in the same vagaries. In more modern times, the Adamites appeared in the simple condition of our first father. In the 13th century, a sect called Les Turlupins, (a denomination which appears to have been an opprobrious nickname), perambulated France, disencumbered of vain accoutrements; and, in 1535, some Anabaptists made an excursion in Amsterdam in the condition in which they had quitted their baths, for which breach of decorum the impious burgomasters had them bastinadoed. We further read of one Friar Juniperus, a worthy Franciscan, who, according to history, “entered the town of Viterboo, and, while he stood within the gate, he put his hose on his head, and his gown being tied round his neck in the shape of a load, he walked through the streets of the town, where he suffered much abuse and maltreatment from the wicked inhabitants; and, still in the same situation, he went to the convent of the brothers, who all exclaimed against him, but he little cared for them, *so holy was the good little brother, (tam sanctus fuit iste fraticellus.)*”

The pranks of Brother Juniper have been performed at sundry periods by various holy men. Are we not warranted in conceiving that these individuals were dæmonomaniacs? for surely the devil alone could have inspired them with such fancies, although Cardinal Damian defends the

practice in the following terms, when speaking of the day of judgment: "Then shall the sun lose its lustre, the moon shall be involved in darkness; the stars shall fall from their places, and all the elements be confounded together: of what service then will be to you those clothes and garments with which you are now covered, and which you refuse to lay aside, to submit to the exercise of penitence?"

It must be remarked, in extenuation of these exhibitions, that they were accompanied by flagellation; which sometimes bore a close analogy to those of the Saturnalia and Lupercalia, and the discipline of the flagellants was not always dissimilar to that of the Luperci.

To resume: Dæmonomania may be considered the result of a morbid condition of the mind, and the dread of supernatural agency. The belief of an incarnation of the devil leads to the natural apprehension of his having taken possession of our bodies, when a credulous creature fancies that he has fallen into his snares, and forsaken the ways of the Omnipotent. This sad delusion has been admirably illustrated by Sir Walter Scott in his curious and learned Demonology. "It is, I think," says he, "conclusive that mankind, from a very early period, have their minds prepared for such events (supernatural occurrences) by the consciousness of the existence of a spiritual world. But imagination is apt to intrude its explanations and

inferences founded on inadequate evidence. Sometimes our violent and inordinate passions, originating in sorrow for our friends, remorse for our crimes, our eagerness of patriotism, or our deep sense of devotion,—these, or other violent excitements of a moral character, in the visions of the night, or the rapt ecstasy of the day, persuade us that we witness with our eyes and ears an actual instance of that supernatural communication, the possibility of which cannot be denied. At other times, the corporeal organs impose upon the mind, while the eye and the ear, diseased, deranged, or misled, convey false impressions to the patient. Very often both the mental delusion and the physical deception exist at the same time ; and men's belief of the phenomena presented to them, however erroneously, by the senses, is the firmer and more readily granted, that the physical impressions corresponded with the mental excitement."

From the foregoing observations we may venture to conclude, that an individual who gives credence to apparitions will also believe in the incarnation of the devil. In both cases we infer that spiritual beings can assume corporeal forms ; and, although we may not presume to question the possibility of such appearances when it may please the Omnipotent so to will it, to believe in possession is actually to admit that the devil is a spiritual being endowed with specific attributes and powers, and acting either independently or with the consent of

the Almighty. This admission would to a certain extent border on the heresy of the Manicheans, who believed, with the heresiarch Cubricus, that there existed a good and an evil principle co-eternal and independent of each other. We find in Holy Writ that indulgence was granted to Satan to visit the earth. But the period when miraculous power ceased, or rather was withdrawn from the church, is not determined. The Protestants bring it down beneath the accession of Constantine, while the Roman Catholic clergy still claim the power of producing or procuring supernatural manifestations when it suits their purpose ; but, as Scott justly observes, it is alike inconsistent with the common sense of either Protestant or Roman Catholic, that fiends should be permitted to work marvels, which are no longer exhibited on the part of religion.

Cullen's opinion on this disease is worthy of remark. He says, "I do not allow that there is any true dæmonomania, because few people now-a-days believe that demons have any power over our bodies or our minds ; and, in my opinion, the species recorded are either a species of melancholy or mania,—diseases falsely referred by the spectators to the power of demons,—feigned diseases,—or diseases partly real or partly feigned."

THE PLAGUE.

PESTILENTIAL diseases have ever been considered as a punishment inflicted on mankind for their manifold offences. The ancients deified the calamity, and viewed it in the light of an avenging god. In the *Œdipus* of Sophocles, the chorus implore Minerva to preserve them from that divinity, which, without sword or buckler, strews the Theban streets with corpses, and is more invincible than Mars himself. Lucretius describes the plague of Athens as a holy fire,—

Et simul, ulceribus quasi inustis, omne rubore
Corpus, ut est, per membra *sacer* quum diditur *ignis*.

The plague was known in an early era both to the Israelites and to the Greeks, and its ancient and modern histories have descended to us depicted in the most terrific colours, in a regular stream of Hebrew, Greek, Arabic, and Roman writers, in most instances offering little variety from the descriptions of neoteric observers.

The pestilences that visited the Israelites were, however, of a different character. They were also considered as a Divine chastisement of the sins of that stiff-necked nation. This visitation, accurately described in Holy Writ, has led to

the most curious disquisitions. Bryant has endeavoured by the most recondite researches to give us the reasons why the Creator thought proper thus to visit his disobedient people. It has truly been observed that the sublime is not far removed from the ridiculous; and it may be said with equal correctness, that enthusiasm in religion too frequently borders upon impiety. Bryant, in his erudite labour, has unhappily fallen into this extreme, in assigning human motives to the decrees of the Deity. This matter is treated in so curious a manner that it will not be irrelevant to notice his bold assertions.

In the first instance, taking the language of the Exodus in the most literal sense, he tells us that the river was turned into blood, *because* it was a punishment particularly well adapted to that blinded and infatuated people, as a warning to the Israelites of the insufficiency of the false gods that the Egyptians worshipped. They had rendered divine homage to the Nile; and Herodotus informs us that the Persians held their rivers in the highest veneration; while the same worship obtained among the Medes, the Parthians, and the Sarmatians. The Greeks adored the Spercheius, to whose god Peleus vowed the hair of his son; the laureated Peneus, the earth-born Achelous, and the loving Alpheus. For, although it may be said that these streams were merely venerated as the symbols of their respec-

tive gods, it is possible that the Greeks might have fallen into the same errors as the worshippers of saintly images in more modern and enlightened times. Therefore, says our learned author, there was a great propriety in the judgment brought upon this people by Moses. They must have felt the utmost astonishment and horror when they beheld the sacred stream changed and polluted, and the divinity which they worshipped so shamefully foiled and debased. Moreover, he tells us that the Egyptian priests were particularly nice and delicate in their outward habits, making constant ablutions; and abhorred blood, or any stain of gore. In this plague the fish that were in the river died, and the river stunk. Now the priests and holy men not only never tasted fish, but looked upon them as deities. A city was built in honour of the god-fish, Oxyrunchus; the Phagrus* was worshipped at Syene, the Mæotis at Elephantis, and Antiphanes tells us that the Egyptians equally revered the eel.

The second plague were frogs, *because*, further saith our sapient authority, they added to the stink of the land, as they "died out of the houses, out of the villages, and out of the fields, and were gathered together in heaps, and the land stunk," Exodus c. viii, v. 13, 14. Bryant candidly confesses that he is rather uncertain if

* According to Ælian, the presence of this fish indicated the approaching overflow of the Nile.

this reptile was an object of reverence, or of abhorrence to the Egyptians; nevertheless, he draws the conclusion that, as the ancients worshipped many deities of dread, and others that they despised, (such as Priapus, Fatua, Vacuna, Cloacina,) Mephitis, or foul effluvia, was held in religious awe, — and, to use his own expressions, since Mephitis “signified stink in the abstract,” and had a temple at Cremona,—the pestilential emanation from the dead frogs might have been considered entitled to some reverence. Plutarch tells us that the frog was an emblem of the sun in Egypt, and that the brazen palm-tree at Delphi had many of these animals engraved on its basis. On the Bembine table we find it sitting upon the lotus, a circumstance observed in various antient gems; the water-lily being, perhaps, congenial to this aquatic tribe, which were denominated the attendants of the deities of streams and fountains. It is also alleged that the frog was deemed an emblem of Apollo and Osiris, from its habit of inflation, which was looked upon as being typical of inspiration. That frogs were considered as evil symbols further appears in the Apocalypse, where we find that “three unclean spirits like frogs come out of the mouth of the dragon, and out of the mouth of the beast, and out of the mouth of the false prophet; they are the spirits of devils working miracles.”

The third plague was lice, *because* the Egyp-

tian priests affected great external purity, wore linen under their woollen garments, and shaved their heads, according to Herodotus, every third day, to prevent any louse, or any other detestable object, from finding a comfortable shelter. Some scholiasts have ventured to insinuate that this insect was a species of gnat; but St. Jerome and Origen very properly observe that this would have been a presumptuous anticipation of the plague of flies, which constituted the *fourth* visitation, *because* flies were also held sacred by the Egyptians, and were worshipped under the name of *Achon*, *Acoron*, and *Zebub*, more particularly in the city of *Acaron* or *Accoron*. Baal was the god of flies, and the fly was worshipped at *Ekron*, where it was called *Baal-zebub*, — hence *Belzebub*.

The next plague was the murrain of beasts; *because* it was necessary that the Israelites should not only see that the cattle of the Egyptians were all infected, while theirs were exempted from the evil; but that their very living symbol of the bull Apis, in whom the soul of Osiris had taken up its dwelling, was affected with epizooty in common with other herds of horned deities, who were called *Dii Stercorei*; though it appears that the ass and the camel were involved in the same calamity.

Our commentator attempts to account for the sixth plague of boils and blains with equal ingenuity. He affirms that this cruel disorder

was sent among the Egyptians to show the Israelites that the medical men, to whom they attributed divine powers, could neither cure nor alleviate the disease. The science of medicine bequeathed by Isis to her son Orus was of no avail, and the learned records of Tosorthrus yielded no information. In vain did their leeches search their cryptæ and sacred cavern, or consult their mystic obelisks, which, according to Manetho, were inscribed with the aphorisms of medical experience; their physicians only increased the number of the *botches* of the land. The Scriptures state that this pestilential malady was produced by the ashes that Aaron and Moses scattered up towards heaven to be wafted over the country. Bryant also accounts for this circumstance, and attributes this method of extending the calamity to the barbarous practice of the Egyptians of burning human victims and scattering the ashes in the air, in a like manner, to propitiate their gods.

The fall of rain, hail, fire, and thunder, that constituted the seventh plague, was a chastisement inflicted on the worshippers of these supposed elements. Their Isis presided over the waters, and Osiris and Hephaistus governed fire. Moreover the flax was smitten, whereby the Egyptians were deprived of the means of making linen, the fineness of which was their boast and their pride. The barley was also destroyed, and they had no materials for brewing their favourite potation, barley-wine; a species of beer which constituted their

chief beverage when the waters of the Nile were turbid and not potable.

But, according to Jacob Bryant, this destruction was not deemed sufficient, since the fecundity of Egypt would soon have replenished their granaries, manufactures, and breweries; therefore locusts were sent to devour everything that the former devastation had spared; and this plague was a punishment of their belief that Hercules and Apollo had the power of controlling these ravenous insects, which were called *Parnopes* and *Cornopes*, whence Apollo was named *Parnopius*, and Hercules *Cornopion*. It also appears that the grasshoppers, or *cicadæ*, were venerated, both as sacred and musical; and the Athenians wore golden ones in their hair, to denote the antiquity of their race of earth-born breed.

Now it is somewhat singular, that while our ingenious author makes such learned enquiries to account for the motives that induced God thus to visit the Egyptians, he does not venture to assign motives for similar calamities which befel other nations and countries; although his researches on the subject are so curious and interesting, that they deserve insertion.

The following is the account given by Beuplam of the destructive inroad of these devourers in the Ukraine:—"Next to the flies, let us talk of the grasshoppers or locusts, which here are so numerous, that they put one in mind of the

scourge of God sent upon Egypt when he punished Pharaoh. These creatures do not only come in legions, but in whole clouds, five or six leagues in length and two or three in breadth, eating up all sorts of grain and grass, so that wheresoever they come, in less than two hours they crop all they can find, which causes great scarcity of provisions. It is not easy to express their numbers, for all the air is full and darkened; and I cannot better represent their flight to you, than by comparing it to the flakes of snow driven by the wind in cloudy weather; and when they alight to feed, the plains are all covered. They make a murmuring noise as they eat, and in less than two hours they devour all close to the ground; then rising, they suffer themselves to be carried away by the wind. When they fly, though the sun shines never so bright, the air is no lighter than when most clouded. In June 1646, having stayed in a new town called Novogrod, I was astonished to see so vast a multitude. They were hatched here last spring; and being as yet scarcely able to fly, the ground was all covered, and the air so full of them, that I could not eat in my chamber without a candle, all the houses being full of them, even the stables, barns, chambers, garrets, cellars, &c. I have seen at night, when they sit to rest themselves, that the roads have been four inches thick of them, one upon another. By the wheels of the carts and the feet of our horses bruising these

creatures, there came from them such a stink, as not only offended the nose but the brain. I was not able to endure the stench, but was forced to wash my nose with vinegar, and to hold a handkerchief dipped in it to my nostrils perpetually. These vermin increase and multiply thus: they generate in October, and with their tails make a hole in the ground, and having laid three hundred eggs in it, and covered them with their feet, die; for they never live above six months and a half. And though the rains should come, they would not destroy the eggs; nor does the frost, never so sharp, hurt them. But they continue to the spring, which is about mid-April; when the sun warming the earth, they are hatched, and leap about, being six weeks old before they can fly; when stronger, and able to fly, they go wherever the wind carries them. If it should happen that a north-east wind prevails, it carries them all into the Black Sea; but if the wind blows from any other quarter, they go into some other country to do mischief. I have been told by persons who understand the languages well, that these words are written in Chaldee characters upon their wings, *Boze Guion*, the scourge of God."

Norden mentions that there were supposed to be hieroglyphic marks upon the heads of these insects. Such was the pestilential scourge of the Ukraine; although I do not apprehend that its inhabitants ever worshipped *Parnopius* or *Cornopion*,

or decorated their filthy heads with golden grasshoppers. Other regions were occasionally visited by these insects. Ludolphus, in speaking of Ethiopia, says, " But much more pernicious than these (the numerous serpents) are the locusts, which do not frequent the desert and sandy places, like the serpents, but the places best manured, and orchards laden with fruit. They appear in prodigious multitudes, like a cloud which obscures the sun ; nor plants, nor trees, nor shrubs appear untouched, and wherever they feed, what is left appears as it were parched with fire. A general mortality ensues ; and regions lie waste for years."

Francis Alvarez thus speaks of the same calamity in the country of Prester John. " In this country, and in all the dominions of Prete Janni, there is a very great and horrible plague : this arises from an innumerable number of locusts, which eat and consume all the corn and the trees. And the number of these creatures is so great as to be incredible, and with their numbers they cover the earth, and fill the air in such wise, that it is a hard matter to see the sun. And if the damage they do were general through all the provinces, the people would perish with famine. But one year they destroy one province, sometimes two or three of the provinces ; and wherever they go the country remaineth more ruined and destroyed than if it had been set on fire." The author adds, that he exorcised them upon their invading a dis-

trict in which he resided, when they all made off; but in the mean time, he adds, "there arose a great storme and thunder towards the sea, which came right against them. It lasted three hours, with an exceeding great shower and tempest. It was a dreadful thing to behold the dead locusts, (whom, by the way, he had exorcised,) which we measured to be above two fathoms high upon the banks of the rivers."

Barbot, in describing Upper Guinea, tells us that "famines are some years occasioned by the dreadful swarms of grasshoppers or locusts, which come from the eastward, and spread all over the country in such prodigious multitudes, that they darken the air, passing over our heads like a mighty cloud."

Orosius states that in the consulship of Marcus Plautius Hypsæus and Marcus Fulvius Flaccus, A. R. 628, Africa was desolated by a swarm of these insects, which for a while were supported in the air, but were ultimately cast into the sea. "After this," he adds, "the surf threw up upon that long extended coast such numerous heaps of their dead and corrupted bodies, that there ensued from their putrefaction a most unsupportable and poisonous stench. This soon brought on a pestilence, which affected every species of animals, so that all birds, and sheep, and cattle, also the wild beasts of the field, died, and their carcasses being soon rendered putrid by the foulness of the air, added greatly

to the general corruption. In respect to men, it is impossible, without horror, to describe the shocking devastation. In Numidia, where at the time Micipsa was king, eighty thousand persons perished. Upon that part of the sea-coast which bordered upon the regions of Carthage and Utica, the number of those carried off by this pestilence is said to have been two hundred thousand."

Now when man in all his proud ignorance dares to assume the power of canvassing the acts of the Almighty, and to attribute to his inscrutable will human motives, which generally arise from mortal frailty, he might as well endeavour to account for similar casualties which visited other nations than the Egyptians, and seek for the causes of the scourges of Carthage, Ethiopia, and Tartary. It is grievous to see the intellectual faculties of man perverted in such idle, one might venture to say, in such impious researches. It is strange that the learned Bryant did not associate the death of the first-born with ideas of primogeniture!

The ninth plague of darkness he attributes to the prevalence of the worship of the sun, under the title of Osiris, Ammon, Orus, Isis, and the like. *Because* the Egyptians, the Ethiopians, Persians, Phœnicians, Syrians, Rhodians, and various other nations, considered themselves Heliadæ, or descendants of the sun. "What, then, can be more reasonable," continues our antiquary, "than for a people who thus abused their faculties, who raised

to themselves a god of Day, their Osiris, and instead of that intellectual light, the wisdom of the Almighty, substituted a created and inanimate element as a just object of worship,—what could be more apposite than for people of this cast to be doomed to a judicial and temporary darkness?" Unfortunately, in the very next paragraph we are told that the Egyptians showed an equal reverence to Night and darkness: obscurity, therefore, was only replacing one false god by another. They paid a religious regard to the *mugall*, a kind of mole, on account of its supposed blindness; and night was conceived more sacred than day, from its greater antiquity, since, according to the Phœnician theology, the wind *Copias* and his wife *Baan* were esteemed the same as Night, and were the authors of the first beings. In the poems of Orpheus, Night is considered as the creative principle; and in the Orphic hymns we find Night invoked as "the parent of gods and men, and the origin of all things."

This attempt to show an analogy between the crimes and sins of the Egyptians and the punishment they received, is too curious to be overlooked. The mania of seeking for the cause of everything, reminds one of a singular character in Trinity College, Dublin, formerly well known, who invariably gave a reason for every direction that he thought proper to issue; and he was once heard to address a servant in the following words:

“Pat, put a cover upon that mutton. It is not for the purpose of keeping it hot, *because* it is cold, but it is *because* I do not wish the flies to get at it, *because* fly-blown meat is both unpleasant to the taste and injurious to the health.”

It appears probable that the plague originated in Egypt. From time immemorial to the present day the lower provinces have been subject to this cruel scourge. Wars, intestine commotions, and misrule have too frequently prevented the local authorities from paying proper attention to measures of public salubrity. Herodotus tells us, that when he was at Memphis, Egypt was just liberated from a long-protracted war, during which political economy had been neglected, canals had been abandoned and choked up, and the frontiers of the land were infested with banditti, while the interior was desolated by pestilential disorders. My much esteemed friend Baron Larrey, in his valuable work upon Egypt, has given a topographical description of the country ; and the influence that the seasons exercise upon it, must be evident. He informs us, that after the spring equinox, and especially towards the beginning of June, the southerly winds are prevalent for about fifty days. Their scorching influence is experienced for upwards of four hours, while they waft with fatal rapidity putrid emanations exhaled by animal and vegetable bodies decomposed in the lakes formed by the receding waters of the Nile. From various observa-

tions it has been concluded that the plague is both an endemic and contagious disease in Lower Egypt, but simply contagious in Upper Egypt, Syria, the other Turkish provinces, and Europe. No account of the plague in Abyssinia, Sennaar, or the interior of Africa, is given by any traveller.

The most fatal European plagues were probably those that desolated London in 1664, and Marseilles in 1720. The accounts of these fearful visitations are as curious as they are appalling. In London it broke out in the beginning of December, when two foreigners (Frenchmen, it was reported) died of this disorder in Long-Acre, near Drury Lane. The cold weather and frost that followed, seemed to check its progress, until the month of April, when it appeared with intensity in the parishes of St. Andrew, Holborn, and St. Clement Danes. In May, the parish of St. Giles buried a great number. Wood Street, Fenchurch Street, and Crooked Lane, were soon visited, until terror was so general, that crowds of inhabitants panic-struck, on foot, on horse, in coaches, waggon, and carts, were thronging Broad-street and Whitechapel, fleeing from the calamity. To such an extent was migration carried, that not a horse could be bought or hired. Many fugitives, fearful of stopping at inns, carried tents to lie in the fields, and people moved in the centre of the streets, in dread of coming into contact with others sallying forth from their houses. During

this state of universal panic, it may be easily imagined that hypocrisy and roguery were busily employed in increasing the evil, at the expense of the credulous. Pretended wizards and cunning people affirmed that a comet had appeared several months previous to the increase of the malady, as a similar meteor had visited London before the great fire; only the fire comet was bright and sparkling, and the plague comet was dull, and of a languid colour. Lilly's Almanac and Gadbury's Astrological Predictions were in general demand; while pamphlets, entitled "Come out of her, my people, lest you be partakers of her plagues," "Fair Warning," and "Britain's Remembrancer," were eagerly circulated, as they denounced the utter ruin of the city. One of these prophets ran about the streets, without the encumbrance of any garment, roaring out, "Yet forty days, and London shall be destroyed;" while another, equally divested of raiment, bellowed out, "O! the great and the dreadful God!" Some asserted that they had seen a hand with a flaming sword coming out of the clouds, while others beheld hearses and coffins floating in the air.

The following is a quaint narrative of these absurdities: "One time before the plague was begun, I think it was in March, seeing a crowd of people in the street, I joined with them to satisfy my curiosity, and I found them all staring up in the air to see what a woman told

them appeared plain to her, which was an angel clothed in white, with a fiery sword in his hand, waving it and brandishing it over his head. She described every part of the figure to the life, showed them the motions and the form; and the poor people came into it readily. ‘Yes, I see it all plainly,’ says one; ‘there’s the sword as plain as can be.’ Another saw his very face, and cried out, ‘What a glorious creature he was!’ One saw one thing, and one another. I looked as earnestly as the rest, and said I could see nothing but a cloud. However, the woman turned from me; called me a profane fellow and a scoffer; told me that it was a time of God’s anger, and dreadful judgments were approaching, and that despisers such as I should *wonder and perish*. Another encounter I had in the open day also, in going through a narrow passage from Petty-France into Bishopsgate churchyard. In this narrow passage stands a man looking through between the palisades into the burying-place, and he was pointing now to one place, then to another, and affirming that he saw a ghost walking upon such a gravestone; he described the shape, the posture, and the movement of it so exactly, crying on a sudden, ‘There it is—now it comes this way—now ’tis turned back!’ till at length he persuaded the people into so firm a belief of it, that they fancied they saw it; and thus he came every day, making a strange hubbub, till Bishopsgate clock struck

eleven, and then the ghost would start and disappear on a sudden."

Such sanctimonious tricks are historical. Don Bernal Dias del Castillo tells us, in his account of the Mexican conquest, that St. Jago appeared in the van of the army, mounted on a white horse, and leading the troops on to victory. He frankly owns that he did not see this blessed vision; nay, that a cavalier, by name Francisco de Morla, mounted on a chesnut steed, was fighting in the very place where the patron of Spain was said to have appeared; but, instead of drawing the natural conclusion, that the whole business was got up as an illusion, he devoutly exclaims, "Sinner that I was, what am I that I should have been permitted to behold the blessed apostle!"

These impostures remind us of the story of the wag who, fixing his eyes upon the lion over Northumberland House, exclaimed, "By heaven! it wags—it wags!" and contrived by these means to collect an immense mob in the street, many of whom swore that they did absolutely see the lion wagging his tail.

Crowds of pretended fortune-tellers, and astrologers and cunning men, were soon in good business, and their trade became so generally practised, that they had signs denoting their profession over their doors, with inscriptions announcing, "Here lives a fortune-teller,"—"Here you may have your nativity cast;" and the head of Friar Bacon, Mo-

ther Shipton, or Merlin, were their usual signs : and if any unfortunate man of grave appearance, and wearing a black cloak, went abroad, he was immediately assailed by the mob as a necromancer, and supplicated to reveal futurity. At such a period, it may be easily imagined that quacks were not satisfied with mere gleanings ; and *infallible pills, never-failing preservatives, sovereign cordials, and incomparable drinks*, against the plague, were announced in every possible manner ; and *universal remedies, the only true plague-water, and the royal antidote*, became themes of universal discourse. An eminent *High Dutch* physician, newly come over from Holland, where he resided during all the time of the plague,—an Italian gentlewoman, having a choice secret to prevent infection, and that did wonders in a plague that destroyed twenty thousand people a-day, were announced by bills at every corner.

One ingenious mountebank realised a fortune by announcing *that he gave advice to the poor for nothing* : crowds flocked to consult him ; but he took half-a-crown for his remedy, on the plea that, although his advice was given gratis, he was obliged to sell his physic. While these speculations were going on, all “plays, bear-baiting, games, singing of ballads, and buckler-play,” were prohibited ; all feasting, “ particularly by the companies of this city,” was punished ; watchmen guarded the doors of the pestiferated, to prevent their

egress, and a red cross was painted on their houses. The inhabitants, thus shut up to suffer the pangs of starvation in addition to those of pestilence, made the best of their way out of their prison by every possible stratagem and bribery. While fervent prayers and loud ejaculations for mercy were heard amongst distracted families, the most offensive blasphemy and ribaldry prevailed amongst the gravediggers, dead-cart drivers, and their wanton companions. If any one ventured to rebuke them, he was asked, with a volley of oaths, "what business he had to be alive, when so many better fellows were shovelled in their graves?" to which was added a salutary recommendation to go home and pray, until the dead-cart called for him. The watchmen got their share of ill-usage and abuse.

All the guards had been marched out of town, with the exception of small detachments at Whitehall and the Tower. Robbery of every description was of course in full vigour, and every vice indulged in with impunity, while despair drove many to madness and suicide,—several individuals rushing naked out of their houses, and running to the river to drown themselves if not stopped by the watch. People fell dead while making purchases of provisions in the market; where, instead of receiving the meat from the butcher's hands, each buyer unhooked his purchase, and paid for it by throwing the value in a vessel filled with vinegar.

Mothers destroyed their children, and nurses smothered their patients, while the bed-clothes were stolen from the couch of the dead.

Among the curious anecdotes of the time, the following is worth insertion: "A neighbour of mine, having some money owing to him from a shopkeeper in Whitecross-street, sent his apprentice, a youth of eighteen years of age, to get the money; he came to the door, and finding it shut, knocked pretty hard until he heard somebody coming down stairs. At length the man of the house came to the door; he had on his breeches or drawers, a yellow flannel waistcoat, no stockings, and a pair of slipt shoes, a white cap on his head, and death in his face. When he opened the door, he said, 'What do you disturb me thus for?'—'I come from such a one, my master,' replied the boy, 'to ask for the money you owe him.'—'Very well, my child,' returns the living ghost; 'call as you go by at Cripplegate church, and bid them ring the bell.' So saying, he went up stairs again, and died the same hour."

The story of the piper is founded on fact. This poor fellow having made merry in a public-house in Coleman-street, fell fast asleep under a stall near London Wall, Cripplegate; the under-sexton of St. Stephen's, one John Hayward, was going his rounds with his dead-cart, when he espied the piper, and, conceiving him to be

a dead man, tumbled him on his heap of corpses, till, arrived at the burying-pit at Mount Mill, as they were about shooting the cart, the musician awoke, and, to the utter terror of the sexton and his comrades, began to set up his pipes.

The following relation of a case of grief is rather remarkable. "A man was so much affected by the death of all his relations, and overcome with the pressure upon his spirits, that by degrees his head sunk into his body so between his shoulders, that the crown of his head was very little seen above the bone of his shoulders, and, by degrees losing both voice and sense, his face looking forward, lay against his collar-bone, and could not be kept up any otherwise unless held up by the hands of other people; and the poor man never came to himself again, but languished near a year in this condition, and died." This was *depression* with a vengeance!

Some of these unfortunate victims of the pestilential disease seem to have had poetical inspirations, for one of two men who had fled to the country was found dead, with the following inscription cut out with his knife on a wooden gate near him :

O m I s E r Y
W E . B o T H S h a L L . D y E
W o E . W o E :

and our historian, who fortunately escaped the

calamity, terminates his work with the following lines :

A dreadful plague in London was
In the year sixty-five,
Which swept an hundred thousand souls
Away ; yet I alive.

Astrologers were of opinion that the plague of London arose from a conjunction of Saturn and Jupiter in Sagittarius on the tenth of October, or from a conjunction of Saturn and Mars in the same sign on the twelfth of November.* Great as the mortality was during that affliction, the history of various other pestilences in foreign countries presents as melancholy a result. In Moscow, the plague introduced by the Turkish army carried off 22,000 inhabitants in a single month, and sometimes 12,000 in twenty-four hours. In Morocco, the mortality amounted to 1,000 daily ; in Old and New Fez, to 1,500 ; in Terodant, to 800. The total loss sustained in these cities and in the Mogadore was estimated at 124,500 souls.

It has been doubted whether the plague be contagious in every instance of its appearance. Various persons have inoculated themselves with its virus with impunity, though several were ultimately victims of the bold experiment. In Egypt Dr. White inoculated himself ten times, but died of the disease after the eleventh

* Diemerbrook states that, in the plague of Nimeguen, all those who were taken ill about new and full moon rarely escaped.

trial.* The atmosphere of contagion appears to be limited, and strict attention to keep up a line of separation generally proves effectual to arrest or check its progress. Contact appears necessary to extend the malady, and a direct absorption through the skin forms the ordinary means of transmission. When the cutaneous pores are closed by oil, or any other substance of the kind, an exemption from the fatal scourge has been frequently observed. Mr. Baldwin states, that among upwards of a million of inhabitants carried off by the plague in Upper and Lower Egypt during the space of four years, not a single oil-man, or dealer in oil, had suffered. Mr. Jackson made the same observation in the plague of Tunis. Dr. Assalini, an intelligent medical officer of the French army in Egypt, does not attribute this exemption to the stoppage of the pores, but as the result of profuse perspiration which the inunction of oil produces. The *zeit jagghy*, or olive-oil, is considered a specific by most of the Asiatics; and my late

* Dr. Desgenettes, physician to the French army, to inspire confidence among the troops, inoculated himself twice without experiencing any other consequence than a slight inflammation of the inoculated parts. Sonnini mentions a Russian surgeon, who was a prisoner in Constantinople with a number of his countrymen, who took it into his head to inoculate his unfortunate comrades, with a view of protecting them from the contagion; but, unfortunately, two hundred of them died, and, fortunately for the survivors, the operator himself died of his own treatment.

friend Mr. Tully observed that all the attendants upon pestiferated patients, who carefully smeared their persons and their clothes with this substance, were exempt from the infection. The same observation was corroborated by Sir Brooke Faulkener, during the plague of Malta.

Various have been the remedial means proposed in this terrific malady, and preservatives against it have been recorded in the following distich:

Hæc tria labificum tollunt adverbia pestem;
Mox, longè, tardè,—cede, recede, redi.

The celebrated plague-water was composed of master-wort, angelica, piony, and butter-bur, viper-grass, Virginia snake-root, rue, rosemary, balm, carduus, water-germander, marygold, dragon-blood, goats'-rue, and mint, infused in spirits of wine.

ABSTINENCE.

HIPPOCRATES asserted that most individuals who abstain from food for seven days, die within that period; or, if they survive this time, and are even then prevailed upon to eat or drink, they still perish. Various instances of persons who have lived much longer without sustenance, have been observed. In the records of the Tower we find the history of Cicely de Ridgeway, who was condemned to death for the murder of her husband in the reign of Edward III, and who remained for forty days without food or drink. This being ascribed to a miracle, she was of course pardoned. From the result of this starvation, the story may be considered fabulous for two reasons: the first, the improbability of the alleged abstinence; and, secondly, the selection of forty days, a period clearly fixed upon for miracle-making, being the exact number of days our Saviour fasted.

We have a better authenticated case in the one mentioned by Dr. Eccles in the *Edinburgh Medical Essays* for 1720. The starved person was a beautiful young lady, about sixteen years of age, who, in consequence of the sudden death

of her father, was thrown into a state of tetanus (lock-jaw) so violent as to render her incapable of swallowing for two long and distinct periods,—the first of thirty-four, and the second of fifty-four days,—during which she neither experienced a sense of hunger nor of thirst, and when she recovered, she was scarcely reduced in size. Sir William Hamilton saw a girl, sixteen years of age, who was extricated from the ruins of a house at Oppido, in which she had remained eleven days: an infant in her arms, but a few months old, had died on the fourth day, as the young are not so able to endure abstinence. Dr. Willan attended a young man who had abstained from any sustenance but a little water flavoured with orange-juice for sixty days: death ensued a fortnight after. Foderé mentions some workmen who were extricated alive from a cold damp cavern, in which they had been immured under a ruin for fourteen days. Cetois, a physician of Poitiers, relates a still more singular case of total abstinence in a girl, who, from the age of eleven to that of fourteen, took no nourishment.

Ann Moore, called the fasting woman of Tutbury, was to a certain extent an imposter, for although there was no truth in her assertion that she lived an incredible time without food, yet it appeared evident that her chief, if not her only support, was tea. That fluid is sufficient

to maintain life appears evident from two papers inserted in the *Philosophical Transactions*; one of them giving an account of four men who were compelled to subsist upon water for twenty-four days, and the other of a young man who tasted nothing but the same fluid for eighteen years. An imposition having been suspected, he was shut up in close confinement for twenty days as a trial, when he uniformly enjoyed good health.

Another wonderful instance of the same kind is that of Janet M'Leod, published by Dr. M'Kenzie: she was at the time thirty-three years of age, unmarried, and from the age of fifteen had had various attacks of epilepsy, which had produced so rigid a lock-jaw that her mouth could rarely be forced open by any contrivance; she had lost very nearly the power of speech and deglutition, and with this all desire to eat or drink. Her lower limbs were retracted towards her body; she was entirely confined to her bed, slept much, and had periodical discharges of blood from the lungs, which were chiefly thrown out by the nostrils. During a few intervals of relaxation, she was prevailed upon with great difficulty to put a few crumbs of bread comminuted in the hand into her mouth, together with a little water sucked from her own hand, and, in one or two instances, a little gruel; but, even in these attempts, almost the whole was rejected. On two occasions also, after a total abstinence

of many months, she made signs of wishing to drink some water, which was immediately procured for her. On the first experiment the whole seemed to be returned from her mouth, but she was greatly refreshed in having it rubbed upon her throat. On the second occasion she drank off a pint at once, but could not be prevailed upon to drink any more, although her father had now fixed a wedge between her teeth. With these exceptions, however, she seemed to have passed upwards of four years without either liquids or solids of any kind, or even an appearance of swallowing; she lay for the most part like a log of wood, with a pulse scarcely perceptible from feebleness, but distinct and regular. Her countenance was clear, and pretty fresh; her features neither disfigured nor sunk; her bosom round and prominent, and her limbs not emaciated. Dr. M'Kenzie watched her with occasional visits for eight or nine years, at the close of which period she seemed to be a little improved.

A Dutch girl of the name of Eve Hergen is reported to have lived from the year 1597 to 1611 with no other support than the scent of flowers. The magistrates of Meurs suspecting imposition, had her closely watched for thirteen successive days, without being able to detect any fraud. Over her picture were affixed some Latin verses, of which the following translation was given in a book called "An Apologie or Decla-

ration of the Power and Providence of God, by George Hakewell, 1635 :"

This maid of Meurs thirty-six yeares spent,
Fourteen of which she tooke no nourishment ;
Thus pale and wan, she sits sad and alone,
A garden 's all she loves to looke upon.

According to Pliny, the *Astoni* had no other food than this Batavian maiden, being unfortunately born without mouths. Sauvages mentions an academician of Toulouse who never thirsted, and passed his summers, notwithstanding the intense heat, without drinking. In most of the recorded cases of total, or nearly total abstinence, water has been found more or less necessary, but not invariably.

That some animals can thrive upon water, and even upon air, is demonstrated by naturalists. Snails and chameleons have been known to exist upon air for years. Garman has found that this nutriment is sufficient for the support of spiders ; and Latreille has confirmed the experiment by fixing a spider to a piece of cork, and precluding it from any communication. Every entomologist repeatedly sees insects living in their cases, although pinned down for an incredible length of time. Mr. Baker relates that he kept a beetle shut up for three years without any food. Mr. Bruce kept two cerastes, or horned snakes, in a glass jar for two years, without any apparent food ; he did not observe that they slept in the

winter season, and they cast their skin as usual on the last day of April.

But a phenomenon still more wonderful is the faculty that animals have been known to possess of living when deprived of atmospheric support. A hog, weighing about one hundred and sixty pounds, was buried in his sty under thirty feet of the chalk of Dover cliff for one hundred and sixty days. When dug out, it weighed but forty pounds, and was extremely emaciated, but clean, and white. The animal had nibbled the wood of the sty, and eaten some loose chalk. Lizards, especially the newt, have been found embedded in chalk-rock, apparently dead, but have re-assumed living action on exposure to the atmosphere. On their detection in this state, the mouth is usually closed with a glutinous substance, so tenaciously, that they often are suffocated in their efforts to extricate themselves from confinement. Toads have been repeatedly discovered in a similar situation, embedded in blocks of stone, or in the very heart of trees. Dr. Edwards, a learned physiologist in Paris, has ascertained that blocks of mortar and heaps of sand possess sufficient porosity to admit enough air to support the life of reptiles; but they all perish if immersed in water or mercury, when surrounded by an exhausting receiver. The duration of existence of the amphibials of the Batrachian family, when plunged in water, depends in a great measure on its temperature.

They die speedily if the water be lower than 32° Fahrenheit, or higher than 108° ; and the longest duration of life is under 32° .

How can we account for these anomalies? Various solid substances are known to proceed from invisible elementary principles. Do water and air contain them? Metallic stones of large volume fall from the air: how are they produced? whence come they? How vain and feeble are our pursuits, when the vanity of science seeks to penetrate into the arcana of nature; searching and endeavouring to account for the causes of causation! What absurd and impertinent hypotheses have not been broached on scholastic benches! They remind us of an anecdote related of the old Parisian Academy, when one of its sapient members read a voluminous memoir to prove that tides were provided by the Creator for the purpose of bringing vessels in and out of harbour; when one of the Encyclopedian wits gravely observed, that he had no doubt of the fact, since he had discovered, after unceasing and laborious research, that noses were made for the purpose of wearing spectacles!

Although total abstinence from food for any length of time, excepting with hibernating animals, is a wondrous phenomenon, yet it is singular how little aliment is necessary for the purpose of sustaining life, and even health. Many instances of a frugality bordering upon starvation are known. The most economical housekeeper on

record was Roger Crabb, the Buckinghamshire hermit, who allowed himself three farthings a week. Dr. Franklin lived on bread and water for a fortnight, at the rate of ten pounds of bread per week. Dr. Gower of Chelmsford had a patient who lived for ten years on a pint of tea daily, now and then chewing half a dozen raisins and almonds, but without swallowing them; once a month, by way of a treat, she ate a morsel of bread the size of a nutmeg.

The late Duke of Portland, after a long illness, during which he was attended by Dr. Warren, lived on bread and water for six weeks, at the expiration of which he was allowed *one boiled smelt*. Numerous persons have been known to live to old age, in perfect health, who never used animal food or wine; such was Dr. Hecquet, the Sangrado of Lesage, who published a curious treatise on fasting in Lent: Paris, 1709. The following lines were written on a man named Offley:

Offley three dishes had of daily roast;
An egg, an apple, and the third a toast.

Most unquestionably, if this Offley was not a man of hard labour, or who took much exercise, this diet, scanty as it may appear, would have been quite sufficient to support life; for his fare was sumptuous, compared to the diet prescribed by St. Theresa to her Carmelite nuns, and which consisted of one egg, herb-soup, with wormwood ashes and aloes. However, in regard to the wondrous

fasting of various hermits and holy men, we must take their histories *cum grano salis*. They clearly belonged to two classes,—enthusiasts or imposters: enthusiasm, which is little short of lunacy, enables the monomaniac to endure starvation with ease; and as to imposters, it is probable that, like Friar Tuck, they had a *bonne bouche* in a corner of their cells.

POISON OF THE UPAS, OR IPO.

SUCH are the names given by the natives of the Molucca Islands and in the Indian Archipelago to a deadly poison which is used to impregnate the heads of their arrows. The tree from which it is extracted is named *Bohou Upas*, *Boa Upas*, and *Pohou Antiar*. Various accounts of its deleterious nature have been given by ancient travellers. Cleyer and Spielman described it upwards of a century back, and state that no antidote to its dreadful action is known, though vomiting, produced by the most disgusting means, was considered the only method of arresting its dire effects. Spielman asserts that the land for several miles round these trees is desolate and barren, as no plant can grow under their influence. The poison, he states, flows in a milky form from the tree, and no one can approach it at this period, as one drop of the fatal juice falling upon the face or hands produces instant stiffness of every limb, followed by rapid death; it is therefore obtained at the end of long bamboo canes, armed with a pointed tube to receive it when plunged into the bark. Rumphius confirms in a great measure the above state-

ments, and describes the tree, which he divides into male and female: he adds, that they only grow in the island of Celebes, and that all around the dreaded spot is desert and consumed. A more recent Dutch traveller, Foersech or Fooerch, did not let so fertile a subject escape, and has cultivated most industriously this dreary desert in the following account.

Sterility prevails for upwards of ten miles round this dreadful tree on the part of the island of Java where it grows. When criminals are sentenced to death, they are offered a free pardon if they consent to seek a small boxful of this valuable yet terrific poison. They are first sent to the dwelling of a priest who resides at a safe distance from the spot; there they arrive, accompanied by their disconsolate and wailing families. They remain with this holy man for a few days, during which he affords them both spiritual comfort and good advice; the latter urging the precaution not to set out until the wind blows in such a direction as to waft from them the floating emanations. On their departure on this dreaded expedition he gives them a small box of silver or tortoise-shell, covers their head and face with a leathern hood with glass eyes, and protects their hands with a thick pair of gloves of the same material. He then accompanies them about two miles on their sad journey, and then he describes the hellish spot

where this treasure is to be found as minutely as any one can describe what he has not seen ; then, giving the poor pilgrim his blessing, departs on his return. This worthy man informed our traveller that, during thirty years which he had held that enviable situation, he had sent off no less than seven hundred criminals, of whom only twenty-two returned ; and he confirmed the statement by exhibiting a list bearing their names and the offences for which they had been tried. Mynheer Foersech further assures his gentle readers, that he witnessed several of these expeditions, and entreated the culprits to bring him some branches of the tree ; but two withered leaves were the only specimens he could obtain from the solitary wretch who had the good fortune to escape, and who described the tree as growing on the borders of a rivulet, being of moderate height, and surrounded by a cluster of young ones. The ground around them was of a brown sandy nature, and strewn with the remains of human victims. He also clearly ascertained that no living creature can exist within fifteen miles of the spot. The streams that flow near it yield no fish, and the birds that fly over it fall to the ground ; several of the latter were occasionally brought to the priest, — whether he ate them, or not, the Dutchman does not inform us. Amongst various offenders doomed to death by this poison he relates the

case of thirteen ladies, who, for the crime of infidelity, were inoculated in the bosom with a lancet dipped in the upas; and in six minutes they had ceased to live. By recent experiments upon animals this part of his narration may be credited; but, in regard to the other account, we must apply to it the French saying, "*Il vaut mieux y croire que d'y aller voir.*"

However, some French travellers thought otherwise; and Mr. Deschamps, physician and naturalist attached to the expedition of Mr. D'Entrecasteaux, when in Java, ascertained that this wonderful tree was not uncommon in the forests of the country, nor was the approach to it in the slightest degree apprehended. The juice procured by incisions in the bark was called by the natives *upas* or *oupas*, and was of so active a nature that it caused immediate death when thrown into the circulation. The Malays mixed it with various other ingredients, more especially galanga and garlic, when they employed it. The Javanese only impregnated their arrows with it for the chase; a proof that they did not consider it as affecting the system of the slain animal. Most probably Foersech's priest was aware of this circumstance when he accepted from the privileged malefactors the game killed by the tree they had sought.

This tree, according to Deschamps, is named in the country, *pohou antiar*; it frequently rises

to the height of thirty or forty feet. When one of its branches is broken, or its bark incised, a milky juice exudes, which becomes inspissated when in contact with the atmosphere. In appearance this tree bears some resemblance to our elm. Mr. Deschamps confirms the relation of Rumphius, who stated that the Dutch, in their wars with the natives, were obliged to wear thick buff cuirasses to protect them against their poisoned missiles, the wounds of which were inevitably fatal.

The latest information relative to the upas has been afforded by the ingenious Mr. Leschenault, who, during his residence in Java, procured two specimens of the poisonous substance obtained in Java, and of that brought from the islands of Borneo and Macassar. In Borneo, the mountaineers of the interior, who are called *Orang-Daias*, collect it, and keep its preparation a profound secret. They carry it carefully wrapped up in palm leaves. Their hunting arrows have heads spear-pointed, and impregnated with this substance; those that are prepared for war bear a shark's tooth fixed in a brass socket, and merely attached to the shaft by the gum resin of the ipo; the barbed point remaining rankling in the wound it has inflicted, the gum dissolves, and speedily brings on death. Mr. Leschenault tried these arrows on dogs and other animals, and they expired shortly after in horrible convulsions.

The natives of Macassar also call this venomous production *ipo*. They have two varieties of the tree, as in Java; the one called *upas antiar*, and the other, much more violent and prompt in its action, *upas tieute*. In the preparation of the poison for use, much mystery is observed by the natives, and various ingredients are mixed up with it; but as they are known to be harmless, such as onion and garlic juice, pepper, ginger, galanga, they are most probably employed to deceive the curious who might wish to ascertain the nature of this deadly composition.

Mr. Leschenault having brought home a small quantity of this poison, it was tried by Messrs. Delile and Magendie in several experiments, when it was found to act more or less violently, according to the age and size of the individual, or the quantity of the upas. One grain and a half inoculated in a young dog killed it in four minutes, only producing one convulsive fit. In a dog weighing fourteen pounds, half a grain of upas occasioned death at the expiration of one hour and fifty-seven minutes, during which the animal experienced several violent convulsions. A few drops of diluted upas, injected in the chest of a dog weighing twenty pounds, occasioned a lock-jaw, which destroyed him in a minute and a half. Eight drops injected in the jugular vein of a horse produced immediate tetanus and speedy death. For further information

regarding these cruel experiments we must refer to the experimenters' publication. It appears, however, that the power of this venomous substance is so intense that time does not weaken it ; for the upas employed in these experiments had been collected and kept for upwards of seven years, when its effects were as prompt as when tried in a recent state. The natives of Java consider sea-salt as the best antidote, but Mr. Delile found it quite inert : various experiments induced him to think that in these cases death is produced by asphyxia ; and he considers the means employed to restore suspended animation in persons supposed to have been drowned, as the most likely to save the life of individuals who might be wounded with this substance.

HOMOPHAGOUS AND POLYPHAGOUS;

APPELLATIONS given to certain individuals of a depraved appetite, that enables them to devour raw meat, and various other substances which most unquestionably would destroy any person not gifted or cursed with such an omnivorous digestion.

Various are the ancient stories related of such voracious wretches. Ovid describes one Erisichthon, who, as a punishment for cutting down the groves of Ceres, (very possibly to obtain fuel to cook his food,) was sentenced to perpetual hunger, and terminated his gluttonous career by eating up his own limbs. The Thasian Theagenes thought nothing of an ox for his dinner; and the famed Crotonian athlete, Milo, knocked down bullocks with his fist for his daily meals, which usually consisted of twenty *minæ* of meat and the same ration of bread. Vopiscus relates that a man was brought before the Emperor Maximilian, who devoured a whole calf, and was proceeding to eat up a sheep, had he not been prevented. To this day, in India, some voracious mountebanks devour a live sheep as an exhibition. Dr. Boelmen of Wittenberg witnessed the performance of one of these

polyphagous individuals, who commenced his repast by eating a raw sheep, a sucking-pig, and, by way of dessert, swallowed sixty pounds of prunes, stones and all. On another festive occasion, he ate two bushels of cherries, with several earthen vases and chips of a furnace. This meal was followed up by sundry pieces of glass and pebbles, a shepherd's bagpipe, rats, various birds with their feathers, and an incredible number of caterpillars. To conclude his dinner, he swallowed a pewter ink-stand, with its pens, a pen-knife, and a sand-box. During this deglutition he seemed to relish his food, but was generally under the influence of potations of brandy. His form was athletic, and he could carry four heavy men on his shoulders for a league. He lived to the age of seventy-nine, but died in a most emaciated state, and, as might be imagined, toothless.

Helwig knew an old man who was in the habit of eating eighty pounds of different articles of food daily. Real Colomb mentions an omnivorous glutton, who, in the absence of any salutary aliment, satisfied his cravings with any other substance, and was once known, when hungry, to eat the contents of a sack of charcoal, and then to swallow the bag to facilitate their digestion. One of the attendants on the menagerie of the Botanical Garden in Paris, who bore the euphonious name of *Bijou*, used to devour all the offals of the theatre of Comparative Anatomy, and ate a dead lion in

one day. He was active, and lived to the age of sixty. A cannibal once desolated the Vivarais, by dragging human victims to his den, where he devoured them. On the opening of the corpse of a convict in the galleys of Brest, there were found in his stomach about six hundred pieces of wood, pewter, and iron.

All these accounts might appear most exaggerated, perhaps fabulous, had not many physicians in Paris known the celebrated Tarrare. The history of this monster is as curious as his habits were disgusting. He commenced his career in life in the capacity of clown to an itinerant quack, and used to attract the notice of the populace by his singular powers of deglutition, swallowing with the utmost ease corks, pebbles, and basketsful of apples. However, these experiments were frequently followed by severe pain and accidents, which once obliged him to seek assistance in the Hôtel Dieu of Paris. His sufferings did not deter him from similar experiments; and he once tried to exhibit his wonderful faculties by swallowing the watch, chain and seals, of Mr. Giraud, then house-surgeon of the establishment. In this repast he was foiled, having been told that he would be ripped up to recover the property. In the revolutionary war Tarrare joined the army, but was soon exhausted on the spare diet to which the troops were obliged to submit. In the hospital of Sultzén, although

put upon four full rations, he was obliged to wander about the establishment to feed upon any substance he could find however revolting, to subdue his voracious hunger. These singular powers induced several physicians to ascertain how far these omnivorous inclinations could carry him in his unnatural cravings. In presence of Dr. Lorentz he devoured a live cat, commencing by tearing open its stomach, and sucking the animal's blood with delight. What was more singular, after this horrible feat, like other carnivorous brutes, he rejected the fur and skin. Snakes were to him a delicious meal, and he swallowed them alive and whole, after grinding their heads between his teeth. One of the surgeons, Mr. Courville, gave him a wooden lancet-case to swallow, in which had been folded a written paper. This case was rejected undigested, and the paper being found intact, it became a question whether he might not be employed to convey secret correspondence; but having been taken up at the Prussian outposts as a spy, being disguised as a peasant without a knowledge of the language, he received a severe bastinado, which effectually cured him of an appetite for secret service, and on his return he had recourse to the safer means of obtaining food in kitchens, slaughter-houses, and dunghills. At last, a child of fourteen months old having disappeared under suspicious circumstances, he was driven out of the hospital, and lost sight of for four years,

when he applied for admission into the hospital of Versailles, in a state of complete exhaustion, labouring under a virulent diarrhœa, which terminated his hateful existence in his twenty-sixth year. He was of the middle size, pale, thin, and weak; his countenance was by no means ferocious, but, on the contrary, displayed much timidity; his fair hair was remarkably fine and soft; his mouth was very large, and one could scarcely say that he had any lips; all his teeth were sound, but their enamel was speckled; his skin was always hot, in a state of perspiration, and exhaling a constant offensive vapour. When fasting, the integuments of his abdomen were so flaccid that he could nearly wrap them round him. After his meals, the exhalation from his surface was increased, his eyes and cheeks became turgid with blood, and, dropping into a state of drowsiness, he used to seek some obscure corner where he might quietly lie down and digest. After his death, all the abdominal viscera were found in a state of ulceration.

Instances are recorded where a similar facility to swallow fluids had been observed. At Strasburg was exhibited the stomach of a hussar who could drink sixty quarts of wine in an hour. Pliny mentions a Milanese, named *Novellus Torquatus*, who, in presence of Tiberius, drank three *congi* of wine. Seneca and Tacitus knew a man of the name of Piso who could drink incessantly for two

days and two nights ; and Rhodiginus mentions a capacious monster called *the Funnel*, down whose throat an amphora of liquor could be poured without interruption.

To what are we to attribute these uncommon, nay, these unnatural faculties? Neither physiological experiments during life, nor anatomical investigation after death, have as yet enabled us to form an opinion. Great as has been the progress of science, we are still doubtful as to the nature of the digestive process. All the hypotheses on the subject are liable to insuperable objections. Hippocrates and Empedocles attributed digestion to the *putrefaction* of food. Experiments have clearly demonstrated the fallacy of this doctrine : rejected food is never in a state of putridity ; on the contrary, meat in a perfect state of putrescence has been restored to sweetness and freshness on being received into the stomach. Dead snakes have been found with animal substances, part of which had been swallowed, and the remainder hanging out of their mouths ; when the swallowed portion was fresh, and the portion exposed to the atmosphere in a state of corruption. Galen, and after his school, Grew and Santarelli, ascribed digestion to a *concoction*, during which food was matured by the stomach's heat, like fruit by the solar rays. Pringle and Macbride advocated the doctrine of *fermentation* ; while Borelli, Keil, and Pitcairn resolved the question by the mechanism of *trituration*,

making a mill of the stomach, which ground down food, according to Piteairn's calculations, with a pressure equal to a weight of one hundred and seventeen thousand and eighty pounds. Boerhaave endeavoured to reconcile the opinions of the *concocters* and *grinders*, by combining the supposed theory of *concoction* and of *trituration*. And lastly, Cheselden fancied that digestion was operated by a peculiar secretion in the stomach, called *gastric juice*; and Haller, Reaumur, Spallanzani, Blumenbach, and most other modern physiologists, concur with him in the same opinion, although admitting that this function is most probably assisted by various accessory circumstances. This juice was found, upon experiment, to be endowed, not only with the antiseptic power of preserving the contents of the stomach from putrefaction, but with the property of being a most powerful solvent. Pieces of the toughest meats and bone have been inclosed in perforated metallic tubes, and thrust down the stomach of carnivorous birds, and in the space of about twenty-four hours the meats were found to be diminished, or, in other words, digested to three-fourths of their bulk, while the bones had totally disappeared. Dr. Stevens had recourse to a similar experiment on the human stomach, by means of a perforated ivory ball, and with the same result. The gastric juice of the dog dissolves ivory; and that of a hen has dissolved an onyx, and diminished a golden coin. Not long

since, upon examining the stomach and intestines of a man who died in a public-house, he was found to have been a *polyphagous* animal, since several clasp-knives that he had swallowed were discovered with their blades blunted and their handles consumed. Since these experiments, however, Dr. Montegre of Paris, who was gifted with the faculty of discharging the contents of his stomach at will, has fully proved that this gastric juice, when not in an acid state, is subject to putrefaction when submitted to external animal heat; that this corruption did not occur when an acid prevailed, and saliva intermixed with vinegar was equally free from a similar decomposition. He moreover asserts, that he had recourse to numerous experiments to digest food artificially in this supposed solvent, but without obtaining results similar to those advanced by Spallanzani; and, finally, he found little or no difference between the gastric juice and saliva. This acid, which generally exists in the gastric juice, has been ascertained by Dr. Prout to be the muriatic, both free and in combination with alkalis: while Tiedemann and Gmelin maintain that, in its natural state, no acid is to be met with; but that, when food is commingled, an acid which they consider the acetic acid is produced in considerable quantity.

The ostrich, that may be considered a connect-

ing link between birds and quadrupeds, is gifted with powerful digestive organs, and is known to swallow stone, glass, and iron ; but this faculty appears to be a gift of all-bounteous Providence, to enable the creature to digest the various substances it meets with when traversing burning deserts for hundreds of miles, when these hard bodies actually perform the function of teeth in the animal's stomach, by aiding the comminution of its indigestible food. The structure of the ostrich has a near resemblance to that of the camel, destined to perform the same dreary journeys. The wings are not designed for flight, and in speed he equals the horse. Adanson affirms that he had seen two ostriches at the factory of Podore, that were broken in to carry single or double riders, and the strongest and youngest would run more swiftly with two negroes on his back than the fleetest racer.

Spallanzani endeavoured to prove that the pebbles and gravel swallowed by various birds were of no use in the process of digestion ; but Hunter, who had found two hundred pebbles in the gizzard of a turkey, and one thousand in that of a goose, demonstrated their utility in the trituration of their food, since these birds were found to be unable to digest, and consequently to thrive upon their nourishment when deprived of this mechanical aid. It is curious that the

owl, which easily digests meat and bones, cannot be made to digest bread or grain, and yet dies if confined to animal food. The eagle, and other birds of prey, can dissolve both. A singular process of digestion is observed in the stormy petrel, which lives entirely on oil and fat substances whenever it can obtain them; but when fed with other articles of food, Nature, true to her laws, converts them into oil; the bird still discharges pure oil at objects that offend him, and feeds his young with the same substance. The petrel must, no doubt, be a bilious subject, for he delights in misery, and his presence is a sure presage of foul weather to the experienced seamen; and when

The wrathful skies
Gallow the very wanderers of the dark,
And make them keep their caves,

he is seen riding triumphantly on the whirlwind, and skimming the deepest chasms of the angry waves. This bird is said to be named 'petrel' from Peter, since, like that saint, he is supposed to have the power of walking on the waters.

The singular appetites which have been noticed seem to have been individual peculiarities, uninfluenced by a morbid condition; but there are cases in which a depraved appetite is symptomatic of disease, where we see persons otherwise possessed of sound judgment longing, not

only for the most improper and indigestible food, but for substances of the most extraordinary and even disgusting nature. Thus we have seen patients, more especially young females and pregnant women, devouring dirt, cinders, spiders, leeches, hair, tallow, and paper; an ingenious writer affirms that "more literature in the form of paper and printed books has been thus devoured, than by the first scholars in Christendom."

Dr. Darwin tells us that he saw a young lady about ten years of age that used to fill her stomach with earth out of a flower-pot, and then vomited it up, with small stones, bits of wood, and wings of various insects. John Hunter has described an endemic disease among the Africans in Jamaica, in which they devoured dirt. Mason Good, when speaking of this affection, says, "that the longing for such materials is, in this disease, a mere symptom, and rarely shows itself till the frame is completely exhausted by atrophy, dropsy, and hectic fever, brought on by a longing of a much more serious kind,—a longing to return home, a pining for the relations, the scenes, the kindnesses, the domestic joys, of which the miserable sufferers have been robbed by barbarians less humanized than themselves, and which they have been forced or trepanned to resign for the less desirable banquet of whips, and threats, and harness, and hunger."

Roderic à Castro relates the case of a lady who could eat twenty pounds of pepper, and another who lived upon ice. Tulpius mentions a woman who, during her pregnancy, longed for salt herrings, and ate fourteen hundred of them at the rate of five herrings per diem. Longius affirms that a lady in Cologne, who was in that state that ladies wish to be who love their lords, took such a fancy to taste the flesh of her husband that she actually assassinated him, and, after indulging in as much fresh meat as the weather permitted, salted the remainder for further use. This cannibal inclination seems not to be uncommon. The said Roderic à Castro knew a woman in the same thriving condition, who felt an inexpressible desire for a bit of the shoulder of a neighbouring baker, and her husband was persecuted by her constant prayers and lamentations to prevail on the worthy man to allow her one bite for charity's sake; but the first bite was so heartily inflicted, that the crusty baker would not submit to a second taste.

In the Philosophical Transactions there is a case related of a woman whose fancies were not quite so solid, and who used to gratify her aërial appetites by putting the nozzle of a bellows down her throat, and blowing away until she was tired. These longings of parturient women are most common; but it is rather curious, that, among our negroes in the West In-

dies, the husbands pretend to long for their wives, and endeavour to gratify them by proxy. Possibly such might have been the fancy of Cambes, the Lydian prince, who, according to Ælian, took it into his head one night to eat up his beloved wife.

CAUSES OF INSANITY.

MADNESS is attributed to moral and physical causes. Physicians do not agree as to the prevalence of either of these sources of human misery. Some of them, most unjustly accused of materialism, seem to lean to the opinion that, generally speaking, physical causes can be traced in *post mortem* examination; while others, equally skilled in accurate anatomical investigations, maintain that these organic derangements are very seldom met with.

Lawrence affirms that he had "examined after death the heads of many insane persons, and had hardly seen a single brain which did not exhibit obvious marks of disease;" and he further states, "that he feels convinced from his own experience, that very few heads of persons dying deranged will be examined after death without showing diseased structure, or evident signs of increased vascular activity." The celebrated Morgagni gives similar results of his extensive dissections. Meckel and Jones are of the same opinion. However, Pinel, whose anatomical pursuits on the subject were most ex-

tensive, clearly declares that he never met with any other appearance within the cavity of the skull than are observable in opening the bodies of persons who have died of apoplexy, epilepsy, nervous fevers, and convulsions. Haslam, whose experience in this matter was also very great, asserts that nothing decisive can be obtained in reference to insanity from any variations of appearance that have hitherto been detected in the brain. Greding observed in two hundred and sixteen maniacal cases which he examined, the whole of whom died of disorders unconnected with their mental ailments, that three of the heads were exceedingly large, two exceedingly small; some of the skull bones were extremely thick, others peculiarly thin; in some the frontal bones were small and contracted, in others the temporal bones compressed and narrow.

In this confusion and clashing of opinions, when unfortunately each theorist views, or fancies that he views, functional or organic derangements sufficiently evident (in his eyes at least) to support his doctrine, it is no easy matter to come to a fair conclusion. It can only be observed, that, as the wonderful sympathies of the brain with other organs, especially the viscera of the abdomen, are universally acknowledged, the morbid condition in which the brain is occasionally found may have arisen from a primary morbid condition of some other organ. Hence it is diffi-

cult to say whether insanity is most generally a primary or a secondary affection. Physical causes act both upon the brain and the abdominal system. Concussion and compression of the brain will occasion nausea, vomiting, and hepatic affections, and the presence of worms in the intestines will excite convulsions and epilepsy. In regard to moral causes, they may also act directly or indirectly upon the brain, or the parts that sympathise with it. Sudden or violent emotions are known to produce an immediate effect upon our digestive functions, which may in turn by their sympathetic connexion act upon the brain and the mind, although the connexion between brain and mind is not yet proved in any conclusive manner.

That mental emotions, whether producing any alteration in the physical condition of the individual, or not, occasion various degrees of insanity, is proved by experience. The French revolution, during its execrable phases, offered a wide and fertile field of observation on this subject; and the various events that marked those fearful times were certainly well calculated to affect any brain capable of becoming deranged. The following results of these observations are curious. "Among the lunatics confined at Bicêtre," says Pinel, "during the third year of the Republic, I observed that the exciting causes of their maladies, in a great majority of cases, were extremely vivid affections of the mind, such as ungovernable or

disappointed ambition, religious fanaticism, profound chagrin, and unfortunate love. Out of one hundred and thirteen madmen with whose history I took pains to make myself acquainted, thirty-four were reduced to this state by domestic misfortunes, twenty-four by obstacles to matrimonial union, thirty by political events, and twenty-five by religious fanaticism. Those were chiefly affected who belonged to professions in which the imagination is unceasingly or ardently engaged, and not controlled in its excitement by the exercise of the tamer functions of the understanding, which are more susceptible of satiety and fatigue. Hence the Bicêtre registers were chiefly filled from the professions of priests, artists, painters, sculptors, poets, and musicians, while they contained no instances of persons whose line of life demands a predominant exercise of the judging faculty,—not one naturalist, physician, chemist, or geometrician.”

The following is a return of moral causes of insanity observed in the Salpêtrière. In the years 1811 and 1812 :

Domestic affliction	105
Disappointed love	46
Political events	14
Fanaticism	8
Fright	38
Jealousy	18
Anger	16
Misfortunes in circumstances	77
Offended vanity	1
Total	323

In Mr. Esquirol's private establishment during the same period :

Domestic affliction	31
Disappointed love	25
Political events	31
Fanaticism	1
Fright	8
Jealousy	14
Misfortunes	14
Offended vanity	16
Baffled ambition	12
Intense study	13
Misanthropy	2

Total 167

It must be observed that the latter return, in which we find twenty-eight persons maddened by disappointed ambition and offended pride, is of a private establishment, whose inmates of course belonged to the better classes of the community.

By the return from Pennsylvania, out of fifty lunatics, thirty-four cases arose from moral causes. Of physical causes hereditary madness is the most prevalent, as appears clearly from the following table extracted from the registers of the Salpêtrière.

Hereditary insanity	105
Convulsion during gestation . .	11
Epilepsy	11
Female derangements	55
Diseases of child-birth	52
Critical periods	27
Old age	60
Insolation	12
Injuries of the head	14

Fever	13
Syphilis	8
Effects of mercury	14
Worms	24
Apoplexy	60

External agents producing sudden terror have been frequently known to bring on insanity. It is related of a child of three years of age, who was so terrified on being brought into a madhouse, that he was subject to horrible dreams and visions until his seventeenth year, when he became a perfect lunatic. Women frightened during pregnancy have often become alienated; and there are two cases reported of young ladies who were found insane the day after their marriage.

Children are generally exempted from this calamitous visitation; yet Frank relates the case of a child at St. Luke's who had been deranged since he was two years old. Age, to a certain extent, seems to influence insanity, and most individuals are alienated between their twentieth and fiftieth years. Haslam states, that out of one thousand six hundred and sixty-four patients admitted into Bedlam, nine hundred and ten came within this period of life. In France it appears that most cases of insanity are noticed between the ages of twenty-five and thirty-five. One fifteenth of these cases among men, and one sixth among women, are observed before their twentieth year; and in the wealthy classes of society

one fourth occur before the same period. The following table from Bicêtre regarding age is not without interest.

Years.	Aged 15	20	30	40	50	60	Total.
1784	5	33	31	24	11	6	110
1785	...	4	29	49	25	14	124
1786	...	4	31	40	32	15	127
1787	...	12	39	41	26	17	142
1788	...	9	43	53	21	18	151
1789	...	6	38	39	33	14	132
1790	...	6	28	34	19	9	103
1791	...	9	26	32	16	7	93
1792	...	6	26	33	18	12	98
1793	...	4	36	28	22	13	113
Total . .	65	329	380	236	130	53	1193

Thus it would appear that the astounding events which took place in France, but more especially in Paris, from the year 1789, the breaking out of the revolution, to 1793, the reign of terror, had no effect upon the intellects of the population; unless it is supposed that the entire nation being in a state of insanity, either madmen were not noticed as any peculiarity, or rushed into mischief and got themselves murdered. This observation as to the influence of public events is confirmed by the following statement of admissions in the Salpêtrière during the comparatively tranquil years of 1811, 1812, 1813, and 1814, although many cases of insanity were said to have arisen from the harsh laws of the conscription.

Years.	Aged	20	25	30	35	40	50	60	70	80	Total
1811	...	34	37	38	27	48	38	24	12	4	262
1812	...	52	34	33	18	38	57	26	19	3	280
1813	...	43	29	33	41	32	57	31	13	6	285
1814	...	42	35	38	31	26	53	34	22	10	291
Total	.	171	135	142	117	144	205	115	66	23	1118

Therefore one might fairly conclude that the taking of the Bastille, the execution of Louis XVI, the bloody sway of the Jacobins, the ambitious wars of Napoleon, and the restoration of Louis XVIII, did not in the slightest degree affect the brains of our happy and philosophical neighbours.

It has been generally imagined that women are more subject to mental alienation than men; this, however, is by no means proved by observation in various countries, as will appear by the following calculation:

		Men.	Women.
1756	Marseilles	50	49
1786	Paris	500	509
1786—1794	Bedlam	4992	4882
1807	St. Luke's	110	153
1802	Paris	1	to 2
—	Berlin	1	to 2
—	Vienna	117	94
—	Pennsylvania	2	to 1
1807—1812	Various Madhouses in France	488	700
1802—1814	Mr. Esquirol's establishment	191	144
Total		6452	6536

It has long been a current opinion that madness is a more common disease in our country than

anywhere else. This may possibly arise from the greater number of our eccentric countrymen that are widely scattered over the globe ; and whenever an individual is observed whose manners and conduct are totally at variance with the habits of any other member of the community, he is generally considered an Englishman. Voltaire came to the sweeping conclusion that one half of the nation was scrophulous, and the other moiety insane.

It would appear that insanity is on the increase ; for in the report of the commissioners for licensing lunatic establishments we find the following statement : “ Insanity appears to have been *considerably* on the increase ; for if we compare the sums of two distant lustra, the one beginning with 1775, and the other ending with 1809, the proportion of patients returned as having been received into lunatic asylums during the latter period, is to that of the former nearly as one hundred and twenty-nine to one hundred.” Dr. Burrows has endeavoured to impugn the correctness of this statement by proving that suicide is more frequent in other countries ; now, unless Dr. Burrows can prove that suicide is an act of insanity, which will by no means be admitted, his observation can bear no weight. Since the peace it may be more difficult to arrive at any conclusion on this subject, founded on the admission of lunatics into public and private establishments ; as, fortunately for the country, mad

people constitute a large majority of our absentees on the continent of Europe and elsewhere; and the inhabitants of Paris, Boulogne, Italy, and of the banks of the Rhine have often fancied that their climate was considered particularly favourable for the recovery of insane persons, who drag their listless nonentity to their inviting shores.

Scott, who accompanied Lord Macartney's embassy to China, observed that very few insane persons were to be found there. Humboldt states that madness is rare amongst the natives of South America. Carr made the same remark in Russia. In Spain and Italy, religious melancholy, and that most vexatious species of insanity called *erotomania*, are more common.

Various professions have been supposed to exercise much influence on the intellectual faculties. The following observations at the Salpêtrière during one year may tend to illustrate this subject:

Field labourers	.	.	.	.	43
Servants	.	.	.	.	51
Needlework women	.	.	.	.	85
Cooks	.	.	.	.	16
Shopkeepers	.	.	.	.	21
Pedlars	.	.	.	.	16
Shoemakers	.	.	.	.	8
House-painters and varnishers	.	.	.	.	5
Housekeepers	.	.	.	.	192
Women of the town	.	.	.	.	33

In Mr. Esquirol's establishment :

Farmers	.	.	.	.	.	3
Military men	.	.	.	.	.	33
Seamen	.	.	.	.	.	3
Merchants	.	.	.	.	.	50
Students	.	.	.	.	.	25
Clerks in public offices	.	.	.	.	.	21
Engineers	.	.	.	.	.	2
Lawyers	.	.	.	.	.	11
Chemists	.	.	.	.	.	4
Physicians	.	.	.	.	.	4
Artists	.	.	.	.	.	8

According to the prevalence of the ideas connected with their former pursuits do we observe the hallucination of these unfortunate persons to be of a different character. What a school of humility is a lunatic asylum ! What a field of observation does it not present to the philosopher who ranges among its inmates ! We find the same aberrations that obtain in society ; similar errors, similar passions, similar miserable self-tormenting chimeras, empty pride, worthless vanity, and overweening ambition. There we

See that noble and most sovereign reason,
Like sweet bells jangl'd, out of tune and harsh.

Each mad-house has its gods and priests, its sovereigns and its subjects, terrific mimicry of worldly superstitions, pomp, pride, and degradation. There tyranny rules with iron sway, until the keeper's lash makes tyrants know there does exist a power

still greater than their own. In mad-houses egotism prevails as generally as in the world, and nothing around the lunatic sheds any influence unless relating to his wretched self. In this struggle between the mind and body, this constant action and re-action of the moral and the corporeal energies, when reason has yielded to the brute force of animal passions, and the body with all its baseness has triumphed over the soul, one cannot but think of Plutarch's fanciful idea, that, should the body sue the mind for damages before a court of justice, it would be found that the defendant had been a ruinous tenant to the plaintiff.

It is said that the Egyptians placed a mummy at their festive board, to remind man of mortality. Would not a frequent visit to a lunatic asylum afford a wholesome lesson to the reckless despot, the proud statesman, and the arbitrary chieftain? There they might converse with tyrants, politicians, and self-created heroes, in all the naked turpitude of the evil passions, who in their frantic gestures would show them that which they wish to be—that which the world considers they are—themselves! Often would the maniac express the very thoughts that ruffle their own pillows; and the dreaded bell that announces the doctor's visit, and which with one loud peal destroys his fond illusions, would be an illustration of that knell which sooner or later must call them from the

busy world they think their own. How beautifully has Filmer expressed the madman's fears !

See yon old miser laden with swelling bags
Of ill-got gold, with how much awkward haste
He limps away to shelter ! See how he ducks,
And dives, and dodges with the gods ; and all
Only in hope to avoid, for some few days
Perhaps, the just reward of his own sad extortions.
The hot adulterer, now all chill and impotent
With fear, leaps from the polluted bed,
And crams himself into a cranny !
There mighty men of blood, who make a trade
Of murder, forget their wonted fierceness ;
Out-nois'd, they shrink aside, and shake for fear
O' th' louder threat'nings of the angry gods.

LEPROSY.

BONTIUS informs us that this disease was observed on the banks of the Ganges, where it was known by the name of *Cowrap*. Kaempfer noticed it in Ceylon and Japan. In Sumatra, whole generations are infected with both leprosy and elephantiasis; and those who are labouring under the latter disease, although it is not contagious, are driven into the woods. Christopher Columbus found lepers in the island of Buona Vista in 1498, and frictions of turtle blood were used to relieve them.

In our days it is a disease of rare occurrence, at least in Europe; yet it was observed at Vetrolles and Martignes, in France, in 1808, and at Pigua and Castel Franco, in Italy, in 1807. The elephantiasis still prevails in our West India colonies, more especially that species which is called "elephant leg," and which is not uncommon at Barbadoes, St. Christopher, and Nevis. Parsons, in his Travels in Asia and Africa, informs us that a similar complaint reigns on the coast of Malabar, where it is called the "Cochin leg." The Hindoo physicians treat it with pills of arsenic and black pepper.

A curious species of leprosy appeared in Rome, under the reign of Tiberius, brought into the country from Asia. The eruption first broke out upon the chin, whence it was called *Mentagra*, and is thus alluded to by Martial :

Non ulcus acre, pustulæve lucentes ;
Nec triste mentum, sordidive lichenes.

From the chin it extended over the entire body, and on its disappearance left scars more unsightly, if possible, than the former disease. Its virulence and difficulty of cure induced the Romans to send to Egypt for attendance. The same disease prevailed in the second century, and Soranus, a physician of Aquitania, was sent for to heal it. Crispus, a friend of Galen, is said to have discovered the best method of cure. Pliny has given an accurate account of the *mentagra* in his *Natural History*, lib. xxvii. cap. 1. According to the same writer, elephantiasis was brought to Rome by Pompey's troops. Plutarch fixes its apparition to the time when Asclepiades of Bithynia flourished as one of his disciples. Themison wrote a treatise on the disease, which is mentioned by Cælius Aurelianus, but has not been preserved from the ravages of time. Lucilius called the affection *odiosa Vitiligo*. The *Gemursa* of Pliny appears to have been a similar complaint ; and Triller thinks that it was the *Gumretha* of the Talmud.

Formerly, in England, the causes of lepers were committed to the ecclesiastical courts, as it was pro-

hibited to prosecute a leper before a lay judge, as they were under the protection of the church, which separated them from the rest of the people by a ritual. At this period a law existed, called *Leproso amovendo*, for the removal of lepers who ventured to mix in society. Thus leprosy may be considered one of the most terrific maladies inflicted on mankind. Holy Writ affords us abundant proofs of its fatal character. It is probable that this disease was first observed under the scorching sun of Egypt, whence it spread its ravages to Greece and Asia; and when the East was obliged to submit to the Roman legions, the conquerors carried the scourge of the vanquished to their own country. From Italy the disorder extended to France; and in the reign of Philip I. we find some members of the church militant, called *hospitaliers*, who spent their arduous life in attending upon lepers and waging war against the infidels.

The Hebrew tribes, on quitting Egypt, were subject to three kinds of leprosy; all of them were distinguished by the name of *Berat* (בהרת), or “bright spot.” One called *Boak* (בהק), of a dull white; and two named *Tsorat* (צרעת), or “venom or malignity:” the first variety of the latter being the *Berat Lebena*, or bright white berat; and the next the *Berat Cecha*, or the dark and dusky berat; both of which were highly contagious, and rendered those who laboured under their attack, unclean, and dangerous to society.

Manetho, Justin, and several historians, pretend that the Hebrews were expelled from Egypt in consequence of their being infected with this formidable disease; a reproach from which Josephus attempted to exculpate his countrymen. It appears, however, that, during their captivity of one hundred and thirty-four years, the Israelites laboured under this awful visitation; and, three thousand years after their migration, we find Prosper Alpinus describing the banks of the Nile as the principal seat of the disease. Lucretius gives the same account of it:

Est Elephas morbus, qui, propter flumina Nili
Gignitur, Ægypto in mediâ, neque præterea usquam.

Pliny and Marcellus Empiricus refer the calamity to the same source. They state, however, that it was more general in the lower classes, although it sometimes attacked their sovereigns; an event which added to the horrors of the infliction, since it appears that royalty had the privilege of bathing in human blood as one of the most effectual curative means. Galen and Avicenna attribute its fatal prevalence in Alexandria to the influence of the climate, and the quality of their food. The Persian writer thus expresses himself: “*Et quando aggregatur caliditas aëris cum malitiâ cibi, et ejus essentia ex genere piscium, et carne salitâ, et carne grossâ, et carnibus asinorum, et lentibus, procul dubio est ut eveniat lepra, sicut multiplicatur in Alexandriâ.*”

The *Boak*, or slighter berat, which is not considered to be contagious, still bears the same denomination amongst the Arabs, and is the λέπρα αλφός, or dull white leprosy of the Greeks; the bright white and dusky berats of the Hebrews were distinguished on account of their malignity and with the *Tsorat* (צרעת), are still called among the Arabians by the Hebrew generic term with a very slight alteration, for the *Berat Lebena* is their *Beras Bejas*, and the *Berat Cecha*, the *Beras Asved*.

While the Arabians borrowed the Hebrew terms, the Greeks took their denominations from the same source, and from *Tsorat* they adopted the word *Psora*. The *Tsorat* is restrained by the Hebrews to the contagious form of leprosy. Amongst the Greeks, *Lepra* was a generic synonyme of *Berat* or *Beras*.

This confusion in the adaptation of the names given to the varieties of leprosy has occasioned much perplexity in the study of the disease. Actuarius, in endeavouring to rectify these errors, has produced a greater confusion. According to him, they are different forms of a common genus. However, the most important distinction was that which defined the contagious and the non-contagious forms. The leprosy described by Moses under the name of *Boak* or *Bohak* was the αλφός of Hippocrates; *Seeth* the φακος; *Saphachath* and *Misphachath* the λευχη; and *Bahereth* the λευκη;

and, according to Carthenser and other writers, this leprosy was the *Leucé* of the Greeks.

The elephantiasis was long confounded with leprosy ; but the former is a tubercular affection of the skin, widely different from the scaly leprosy, and certainly not contagious. Its singular name was derived from the condition of the surface of the huge mis-shapen limbs of those who were affected with the malady, and which bore some resemblance to the leg of an elephant. This morbid state is not uncommon in the island of Barbadoes, and in England it has been called "the Barbadoes leg." The original Arabic name for this affection was *Dal Fil*, or "the elephant's disease," which is now the common denomination ; although it is frequently abridged into *Fil* alone, literally *Elephas*. The elephantiasis is not even alluded to by Moses in his descriptions of leprosy. However, the elephant leg of the Arabians is a disease totally different from the specific elephantiasis, which is a disorder of the skin, the roughness of which led to the name, and which the Arabians called *Juzam* or *Judam*.

These errors of description amongst medical writers have of course occasioned much confusion and perplexity in the productions of travellers and historians, who have generally confounded all these diseases with the Hebrew leprosy, or the leprosy which for so long a period desolated the fairest portions of Europe, where every country

was crowded with hospitals established for the exclusive relief of the malady. The number of leper-houses, as they were denominated, has been singularly exaggerated. Paris has been made to assert that there were nineteen thousand of these hospitals, whereas he merely stated that the Knights Hospitalers, under various patron saints, but more particularly St. Lazarus, were endowed with nineteen thousand manors to support their extensive establishments; and he thus clearly expressed himself, "*Habent Hospitalarii novemdecim millia maneriorum in Christianitate.*" It appears that in the reign of Louis VIII, France had no less than two thousand of these hospitals. Leprosy was well known in the eighth century, and St. Ottomar and St. Nicholas were considered the first founders of establishments for its treatment in France and in Germany. The Crusaders, however, by their connexions with the East, materially increased its inroads in Europe, and the disgusting malady appears to have been considered as a proof of holiness. Mœhser, in his work "*De medicis equestri dignitate ornatis,*" informs us that the Knights of the order of St. Lazarus were not only entrusted with the care of lepers, but admitted them into their noble order: their Grand Master was himself a leper. The Crusaders, returning from their useless wars eaten up with the disease, received the honourable distinction of being *pauperes Christi*,

morbi beati Lazari languentes. The most distinguished individuals in the land attended upon them with the utmost humility ; and Robert, King of France, used to wash and kiss their filthy feet to keep himself in odour of sanctity. All these attentions, however, did not always prevent the lepers from complaining of their complicated sufferings ; but they were exhorted by holy men (who of course had never experienced the miseries of the malady) to be of good comfort, as their illness was a blessed favour conferred upon them as the elect of the land. St. Louis thought the Sire de Joinville an unbeliever ; for having once asked him which he would prefer, being a *mezieu* or *laide* (a leper), or having to reproach his conscience with any mortal sin, his favourite replied to the singular question, that he would rather be guilty of thirty deadly sins ; whereupon the sanctified monarch severely rebuked him by telling him in the quaint language of the times, “Nulle si laide mezeuerie n'est, comme de estre en péché mortel.”

Notwithstanding the sanctity of their disease, lepers were by various laws separated from the healthy portion of the community. The ceremonies used on these occasions were curious ; and we find the following description of them in the History of Bretagne : “A priest in his sacerdotal robes went to the leper's dwelling, bearing a crucifix. He was then exhorted to submit with resignation to the affliction : he afterwards threw holy

water upon him, and conducted him to church. There he was stripped of his ordinary vestments, and clothed in a black garment; when he knelt down to hear mass, and was again sprinkled with holy water. During these ceremonies, the office for the dead was duly sung, and the leper was finally led to his destined future residence. Here he again knelt, received salutary exhortations to be patient, and a shovelful of earth was thrown on his feet. His dwelling was most diminutive: his furniture consisted of a bed, a water-jug, a chest, a table, a chair, a lamp, and a towel. He farther received a cowl, a gown, a leathern girdle, a small cag with a funnel, a knife, a spoon, a wand, and a pair of *cliquettes*, (a sort of castanets,) to announce his approach. Before leaving him, the priest added another blessing to these gifts, and departed, after commanding him under the severest penalties never to appear without his distinctive apparel, and barefooted; never to enter a church, a mill, or a baker's shop; to perform all his ablutions in streams and running waters; never to touch any article he wanted to purchase, except with his wand; never to enter drinking-houses, but to buy his liquor at their doors, having it poured into his barrel by means of the funnel graciously given him for that purpose; never to answer any question unless he was to windward of his interlocutor; never to presume to take a walk in a narrow lane; never to touch or go near children; and only to

eat, drink, and junket with his brother lepers ; and invariably to announce his unwelcome approach by rattling his castanets."

The offsprings of these sequestered creatures were seldom baptized ; and when this rite was performed, the water was thrown away. After this oration his ghostly adviser took his final leave, and the patient's former dwelling was burnt to the ground. The sepulchre of St. Mein, in Brittany, was frequently visited by these poor creatures ; and on such occasions they were obliged to have both their hands covered with woollen bags, as a distinguishing mark amongst the other pilgrims. Lepers were only allowed to intermarry with fellow-sufferers ; yet we find in one of the Decretals of St. Gregory, that any woman who chose to run the chances of contagion could please her fancy. St. Gregory perhaps thought this the most effectual method of preventing the dreaded intercourse, as most probably, had it been prohibited, lepers would have been in great request, they having always been remarked for their amorous propensities. Muratori informs us that these unfortunates did not always submit quietly to these severe regulations, but several times joined the Jews in a revolt against the authorities.

This affliction has been observed in various countries. In Iceland it is called *Likraa* ; in Norway, *Radesyge*, or *Spedalskhed*. It is to be appre-

hended that many of these cases of leprosy belong more particularly to the elephantiasis: such is the red disease of Cayenne, and the *Boasi* of Surinam.

It is especially in the East, its probable original seat, that leprosy is observed. In Damascus there are two hospitals for its treatment. The waters of the Jordan are still considered efficacious in its cure, and the waters of Abraham's well are looked upon as a specific. In Candia the disease was common, and lepers were noted for their obscene profligacy. From Crimea it has also been carried to Astracan, whence it infected the Cossacks of Jaïck. Pallas and Gmelin have given an accurate account of its invasion.

THE ASPIC.

VARIOUS opinions are entertained respecting the reptile that inflicted the fatal sting on Cleopatra. According to Pliny, it had hollow fangs, which distilled the venom in the same manner as the tail of the scorpion. Ælian states it to have been a snake that moves slowly, covered with scales of a reddish colour, his head crowned by callous protuberances, and whose neck becomes swollen and inflated when he sheds his poisonous secretion. Other naturalists affirm that the scales are shining, and the eyes of a dazzling brightness; while some authorities maintain that the reptile's hue is of a dark brown, and that, like the chameleon, it can assume the colour of the ground on which it drags its writhing form. However, later observers have now clearly ascertained that the aspic of the ancients is the *coluber haje*, called by the Arabs *nascher*, and described by Lacepède as the Egyptian viper. Lucan seems to have described this serpent in the following lines :

Hic, quæ prima caput movit de pulvere tabes
Aspida somniferum tumida cervice levârit.

According to Hasselquist, the aspic's head is raised

in a protuberance on both sides behind the eyes ; the scales which cover the back are small, of a dirty white colour, and speckled with reddish spots. The lower surface of the reptile is striated with one hundred and eighteen small parallel zones, and forty-four smaller ones are under the tail. The teeth resemble in their structure those of other vipers ; and, when the animal is irritated, its neck and throat are swelled up to the size of the body. Authors vary in regard to its length. Hasselquist, from whom we have borrowed the above description, says that it is a short reptile ; while Savary assures us that it sometimes measures six feet.

The ancients stated that the poison of the aspic did not occasion any pain, but that the strength of the person it had stung gradually sunk into a calm and languid state, followed by a sound sleep, the forerunner of dissolution. Modern travellers assure us, on the contrary, that this venom is most active ; and Hasselquist has observed an aspic in Cyprus, whose bite brought on a rapid mortification, which in general proved fatal in a very few hours.

In Egypt the viper is still made use of in medicinal preparations ; and a great number of them are sent to Venice for the confection of the celebrated *Theriaca*. Under Nero, we are told, these reptiles were imported into Rome for pharmaceutical purposes.

In the above description, and endeavour to ascertain the nature of the aspic of the ancients, there must be some error. The *coluber aspis* of Linnæus is not venomous, and we may therefore conclude that the aspic was of the same species as our viper. The venom of this animal is of a yellow tinge, and small in quantity, seldom exceeding two grains in weight. In hot weather it becomes more active in its effects. Time does not seem to deprive it of its fatal properties ; for instances have been known of persons having pricked their fingers with the pointed fangs of a viper preserved in spirits, when the most serious accidents have followed. The dried teeth lose this noxious power. The venom of the viper may be swallowed without any risk, provided there is not an ulcer in the mouth. Fontana has made upwards of six thousand experiments to prove the activity of this substance. A sparrow died under its influence in five minutes, a pigeon in eight or ten ; a cat sometimes did not experience any inconvenience, a sheep seldom or never ; and the horse appears to be proof against its action.

Some naturalists have affirmed that the female viper, in cases of sudden alarm, possesses the faculty of securing the safety of her young by swallowing them and keeping them concealed in her stomach, as the kangaroo secures her offspring in her pouch. This assertion, although fabulous, was credited by Sir Thomas Brown, and since by

Dr. Shaw. Stories equally absurd have been circulated of this reptile. The Egyptians considered the viper as a typification of a bad wife, since they believed that during their union the female was in the habit of biting off her partner's head. They also looked upon it as the emblem of undutiful children, from the idle belief that the viper came into the world by piercing an opening in its mother's side.

SELDEN'S COMPARISON BETWEEN
A DIVINE, A STATESMAN, AND A PHYSICIAN.

IF a physician sees you eat any thing that is not good for the body, to keep you from it he cries out "*It is poison !*" If the divine sees you do any thing that is hurtful to your soul, to keep you from it he cries out "*You are damned !*"

To preach long, loud, and damnation, is the way to be cried up. We love a man who damns us, and we run after him again to save us. If a man has a sore leg, and he should go to an honest and judicious surgeon, and he should only bid him keep it warm, or anoint it with some well-known oil that would do the cure, haply he would not much regard him, because he knows the medicine beforehand to be an ordinary medicine. But if he should go to a surgeon that should tell him, "Your leg will be gangrene within three days, and it must be cut off; and you will die, unless you do something that I could tell you," what listening there would be to this man ! "*Oh ! for the Lord's sake, tell me what this is:—I will give you any contents for your pains.*"

This ingenious antiquary has also made some

quaint comparisons between doctors of the body and doctors of the public interests. "All might go on well," he says, "in the commonwealth, if every one in the parliament would lay down his own interest and aim at the general good. If a man was rich, and the whole college of physicians were sent to him to administer to him severally; haply, so long as they observed the rules of art, he might recover. But if one of them had a great deal of scammony by him, he must put off that; therefore will he prescribe scammony; another had a great deal of rhubarb, and he must put off that; therefore he prescribes rhubarb: and they would certainly kill the man. We destroy the commonwealth, while we preserve our own private interests and neglect the public."

Grotius called John Selden "the honour of the English nation;" and Bacon had such an implicit faith in his judgment, that he desired in his will that his advice should be taken respecting the publication or suppression of his posthumous works.

THE LETTUCE.

VARIOUS species of this plant were known to the ancients. Its type is supposed to be the *Lactuca quercina*, or the *Lactuca scariola*; both of Asiatic origin. Many powerful effects were formerly attributed to its use. It was considered as producing sleep, and recovery from intoxication; it was in consequence of this belief that this salad was served up after meals. Thus Martial tells us,

Claudere quæ cœnas Lactuca solebat avorum,
Dic mihi cur nostras inchoat illa dapes.

Columella thus describes its properties :

Jamque salutari properet Lactuca sapore
Tristia quæ relevet longi fastidia mori.

This belief in its narcotic qualities induced the ancients to esteem it as an aphrodisiac: the Pythagoreans had therefore named it *ευνουχιον*; and Eubulus calls it the food of the dead, *mortuorum cibum*. Venus covered the body of her beloved Adonis with lettuce leaves to calm her amorous grief; and vases, in which they were planted, were introduced in the Adonian festivals. Galen, who had faith in its powers, called it the herb of sages, and in his sleepless nights sought

its influence by eating it at supper. It was also frequently put under the pillow of the rich to lull them to repose. Its cooling qualities were so much dreaded by the Roman gallants, that its use was abandoned; but Augustus's physician, Antonius Musa, having calmed by its prescription his master's uneasiness in a hypochondriac attack, lettuce recovered its popularity: a statue was erected to the doctor, and salad once more became the fashion, although the prejudices against it could not be removed. Lobel informs us that an English nobleman, who had long wished for an heir, but in vain, was blessed with a numerous family by leaving off this Malthusian vegetable.

MEDICAL FEES.

SUCH is the perversity of our nature, that the remuneration given with the greatest reluctance is the reward of those who restore us, or who conscientiously endeavour to restore us, to health. The daily fees, it is true, are not handed with regret, for the patient is still suffering ; but if they were to be allowed to accumulate to a considerable amount, they would be parted with, with a lingering look. The lawyer's charges for a ruinous litigation, the architect's demands for an uncomfortable house, are freely disbursed, though if exorbitant they may be taxed ; but the doctor's—a guinea a visit!—is sheer extortion. 'Send for the apothecary : the physician merely gives me advice ; the apothecary will send me plenty of physic : at any rate I shall have something for my money.'

To what can this unjust, this illiberal feeling be attributed ? Simply to vanity and pride. Illness and death level all mankind. The haughty nobleman, who conceives himself contaminated by vulgar touch, can scarcely bring himself to believe that he is placed upon the same footing

as a shoe-black. All *prestiges* of grandeur and worldly pomp vanish round the bed of sickness; and the suffering peer would kneel before the humblest peasant for relief. Then it is that money would be cheerfully lavished to mitigate his sufferings. But how soon the scene is changed! The patient is well, thrown once more in the busy vortex of business or of pleasure. He had been slightly indisposed; his natural constitution is excellent: the doctors mistook his case; thought him very ill, forsooth; but nature cured him.

Could the ambitious mother admit for one moment that her daughter had been seriously ill?—a sick wife is an expensive article! If her medical attendant unfortunately hinted that the young lady had been in danger, he is considered a busy old woman, exaggerating the most trifling ailment to obtain increase of business; in fact, a dangerous man in a family where there are young persons—to be provided for. Nor can we marvel at this. No one likes to be considered morally or physically weak, excepting hypochondriacs, who live upon groans, and feel offended if you tell them that they do not look miserable. The soldier will describe the slightest wound he received in battle as most severe and dangerous; a feeling of pride is associated with the relation. The bold hunter will boast of a fractured limb; the accident showed that he was a daring horseman. Nay, the agonizing gout is a fashionable disease, which

seems to proclaim good living, good fellowship, and luxury : it is, in short, a gentlemanly disease. But the slow ravages of hereditary ailments, transmitted from generation to generation with armorial bearings, the developement of which may be averted by proper care, or hurried on by fashionable imprudence ! how difficult even to hint to a family the presence of the scourge, when, through the transparent bloom of youth and beauty, our experienced eye reads the fierce characters of death in the prime of years. The aerial coronet floats in fond visions before the doting mother's ambitious eyes. A man would be a barbarian, nay, a very brute, to deprive the darling girl of the chances of Almacks, the delights of the pestiferous ball-room, or the galaxy of court or opera !

To attend the great is deemed the first stepping-stone to fortune, and patronage is considered as more than an equivalent of remuneration. Too frequently does the physician placed in that desirable situation forget what Hippocrates said of the profession. "The physician stands before his patient in the light of a demigod, since life and death are in his hands."

Curious anecdotes are related of this unbecoming subserviency. A courtly doctor, when attending one of the princesses, was asked by George III. if he did not think a little ice might benefit her. "Your majesty is right," was the reply ; "I shall order some forthwith." "But perhaps it might be too

cold," added the kind monarch. "Perhaps your majesty is right again; therefore her royal highness had better get it warmed."

This absurd deference to rank and etiquette by a physician, who at the moment is superior to all around him, reminds one of an account given by Champfort of a fashionable doctor. "D'Alembert was spending the evening at Madame Du Deffand's, where were also President Hénault and M. Pont de Vesle. On this flexible physician's entering the room, he bowed to the lady with the formal salutation, '*Madame, je vous présente mes très humbles respects.*' Then, addressing M. Hénault, '*J'ai bien l'honneur de vous saluer.*' Turning round to M. De Vesle he obsequiously said, '*Monsieur, je suis votre très humble serviteur,*' and at last, condescending to speak to D'Alembert, he nodded to him with a '*Bonjour, Monsieur!*'" On such occasions a condescending smile from power is considered a fee.

Reluctance in remunerating medical attendants was also manifested by the ancients; and Seneca has treated the subject at some length. The difficulty in obtaining remuneration has unfortunately rendered many physicians somewhat sordid, and loth to give any opinion unless paid for. In this they are unquestionably right, as gratuitous advice is seldom heeded; and one of the most distinguished practitioners used to say, that he considered a fee so necessary to give weight to an opinion, that,

when he looked at his own tongue in the glass, he slipped a guinea from one pocket into another.

To consider themselves in proper hands, patients must incur expenses, and as much physic as possible be poured down. Malouin, physician to the Queen of France, was so fond of drugging, that it is told of him, that once having a most patient patient, who diligently and punctually swallowed all the stuff he ordered, he was so delighted in seeing all the phials and pill-boxes cleaned out, that he shook him cordially by the hand, exclaiming, "My dear sir, it really affords me pleasure to attend you, and you *deserve* to be ill." The London practitioners must surely meet with incessant delight !

The most extraordinary remuneration was that received by Levett, Dr. Johnson's friend and frequent companion. It was observed of him that he was the only man who ever became intoxicated from motives of prudence. His patients, knowing his irregular habits, used frequently to substitute a glass of spirits for a fee ; and Levett reflected that if he did not accept the gin or brandy offered to him, he could have been no gainer by their cure, as they most probably had nothing else to give him. Dr. Johnson says "that this habit of taking a fee in whatever shape it was exhibited, could not be put off by advice or admonition of any kind. He would swallow what he did not like, nay, what he knew would injure

him, rather than go home with an idea that his skill had been exerted without recompense; and had his patients," continues Johnson, "maliciously combined to reward him with meat and strong liquors instead of money, he would either have burst, like the dragon in the Apocrypha, through repletion, or been scorched up, like Portia, by swallowing fire." But though this worthy was thus rapacious, he never demanded any thing from the poor, and was remarked for his charitable conduct towards them.

Various professional persons have sometimes endeavoured to remunerate their medical attendants by reciprocal services: thus an opera-dancer offered to give lessons to a physician's daughters for their father's attendance upon him; and a dentist has been known to propose to take care of the jaws of a whole family to liquidate his wine bill. One of the wealthiest merchants of Bordeaux wanted to reduce the price of a drawing-master's lessons, on the score of his taking his children's daubs with him to sell them on account. This arrangement, however, did not suit the indignant artist, who left the Cræsus in disgust.

In one of the old French farces there is an absurd scene between Harlequin and his physician. The motley hero had been cured, but refused to remunerate his Esculapius, who brought an action for his fees, when Harlequin declares to the judge that he would rather be sick again;

and he therefore offers to return his health to the doctor, provided he would give him back his ailments, that each party might thus recover their own property. This incident was perhaps founded on an ancient opinion of Hippocrates, who frequently mentioned salutary diseases. In 1729, a Dr. Villars supported a thesis on this subject, entitled "*Dantur-ne morbi salutare?*" and Theodore Van Ween has also written a learned dissertation on the same subject.

A celebrated Dublin surgeon was once known to give a lesson of economy to a wealthy and fashionable young man remarkably fond of his handsome face and person. He was sent for, and found the patient seated by a table, resting his cheek upon his hand, whilst before him was displayed a five-pound note. After some little hesitation he removed his hand, and displayed a small mole on the cheek. "Do you observe this mark, doctor?" "Yes, sir, I do." "I wish to have it removed." "Does it inconvenience you?" "Not in the least." "Then why wish for its extirpation?" "I do not like the look of it." "Sir," replied the surgeon, "I am not in the habit of being disturbed for such trifles; moreover, I think that that little excrescence had better remain untouched, since it gives you no uneasiness; and I make it a rule only to take from my patients what is troublesome to them." So saying, he took the five-pound note, slipped it into his pocket, and

walked out of the room, leaving the patient in a state of perfect astonishment. It is related of a physician who received his daily fee from a rich old miser, who had it clenched in his fist when he arrived, and turned his head away when he opened his hand for the doctor to take it, that, on being informed his patient had died in the morning, not in the least disconcerted he walked up to the dead man's chamber, and found his clenched fist stretched out as usual: presuming that it still grasped the accustomed remuneration, with some difficulty he opened the fingers, took out the guinea, and departed.

ENTHUSIASM.

ENTHUSIASM, from its derivation, might in strictness be called a *fixity of idea in divinity*; but Locke has given a better definition of this morbid state of our intellectual faculties in considering it as a heated state of the imagination "*founded neither on reason nor divine revelation, but arising from the conceits of a warmed or overweening brain.*" I shall not venture to take the field of controversy to support this doctrine against that of some metaphysicians, who most probably would consider this mental aberration as an original and natural judgment inspired by the Almighty, founded not on reason or reflection, but an instinctive impulse of the powers of the mind.

The Hebrews named this impulse *Nabi* נביא, (plural *Nebiim*), "to approach or enter," on the surmise that the spirit pervaded the prophets, who were called *Roeh* רוֹאֶה, or *Seeing*, hence *Seers*.

Plato divided enthusiasm into four orders. I. *The Poetical*, inspired by the Muses. II. *The Mystic*, under the influence of Bacchus. III. *The Prophetic*, a gift of Apollo; and IV. *The Enthusiasm of Love*, a blessing from Venus Urania. This im-

mortal philosopher was not the visionary speculatist which some writers have represented him ; his logic did not consist of frivolous investigations, but embraced the more useful subject of correct definition and division, as he sought to reconcile practical doctrines of morality with the mysticism of theology by the study of Divine attributes. Whatever some of the Eclectic philosophers might have asserted, Plato considered that our ideas were derived from external objects, and never contemplated the extravagant doctrine of embodying metaphysical abstractions, or personifying intellectual ideas.

To this day, the attentive observer will find Plato's classification of enthusiasm to be correct. The ecstatic exaltation of religion and of love are not dissimilar ; only the latter can be cured, the former seldom or never admits of mitigation : the fantastic visions of the lover may be dispelled by infidelity in the object of his misplaced affection ; the phantasies of fanaticism can only yield to an improbable state of infidelity. Shaftesbury has justly observed, "There is a melancholy which accompanies all enthusiasm, be it of love or religion ; nothing can put a stop to the growing mischief of either, till the melancholy be removed, and the mind be at liberty to hear what can be said against the ridiculousness of an extreme in either way."

Our poet Rowe has beautifully pointed out

the facility with which a noble and martial soul can free itself from love's ignoble trammels.

Rouse to the combat,
And thou art sure to conquer ; war shall restore thee :
The sound of arms shall wake thy martial ardour,
And cure this amorous sickness of thy soul,
Begot by sloth, and nurs'd by too much ease.
The idle God of Love supinely dreams
Amidst inglorious shades and purling streams ;
In rosy fetters and fantastic chains
He binds deluded maids and simple swains ;
With soft enjoyments woos them to forget
The hardy toils and labours of the great :
But if the warlike trumpet's loud alarms
To virtuous acts excite, and manly arms,
The coward Boy avows his abject fear,
On silken wings sublime he cuts the air,
Scar'd at the noble horse and thunder of the war.

The only trumpet that can arouse the religious enthusiast from his ascetic meditations is the war-whoop that calls him to destroy all those who impugn his doctrines in a battle-field, where each champion seeks pre-eminence in cruelty, and rancorous persecution.

When we contemplate the miseries that have arisen from fanaticism, or fervid enthusiasm, although it is but a sad consolation, yet it affords some gratification in our charitable view of mankind, to think, nay, to know, that this fearful state of mind is a disease, a variety of madness, which may in many instances be referred to a primary physical predisposition, and a natural idiosyncrasy.

It is as much a malady as melancholy and hypochondriacism. In peculiar constitutions it grows imperceptibly. Lord Shaftesbury has made the following true observation, "Men are wonderfully happy in a faculty of deceiving themselves whenever they set heartily about it. A very small foundation of any passion will serve us not only to act it well, but even to work ourselves in it beyond our own reach; a man of tolerable good-nature, who happens to be a little piqued, may, by improving his resentment, become a very fury for revenge."

Thus it is with enthusiasm, a malady which in its dreadful progress has been known to become contagious, one might even say epidemic. Vain terrors have seized whole populations in cities and in provinces; when every accident that happened to a neighbour was deemed a just punishment of his sins, and every calamity that befel the fanatic was considered the hostile acts of others. Jealousy and dark revenge were the natural results of such a state of mind, when the furious fire of bigotry was fanned by ambition until monomania became *dæmonomania* of the most hideous nature, and every maniac bore in his pale and emaciated visage the characteristic of that temperament which predisposes to the disease. Seldom do we observe it in the *sanguineous temperament*, remarkable for mental tranquillity, yet determined courage when roused to action. The *choleric* and *bilious*,

impetuous, violent, ambitious, ever ready to carry their point by great virtues or great crimes, may no doubt rush into a destructive career; but then they lead to the onset the atrabilious, men saturated with black bile, and constituting the *melancholy temperament*. Here we behold the countenance sallow and sad; the visage pale and emaciated, of an unearthly hue; gloom, suspicion, hate, depicted in every lineament; the mirror of a soul unfitted for any kind sentiment of affection, pity, or forgiveness. Detesting mankind, and detested, they seek solitude, to brood upon their wretchedness, or to derive from it the means to make others as miserable as themselves. Such do we usually find the enthusiastic monomaniac. His ideas are concentrated into a burning focus, which consumes him like an ardent mirror. His life of relation is nearly extinguished. His external senses are rendered so obtuse and callous that he becomes insensible to hunger and thirst, to heat and cold however intense; and bodily injuries, which would occasion excruciating agonies in others, he bears without any apparent feeling. It has been erroneously supposed that such individuals, being hostile to mankind, are prone to do evil,—this is not generally the case; they seem satisfied with their own sufferings, and only seek to inflict them upon others when roused from their concentration by fanaticism.

A late ingenious writer, in his work entitled "The Natural History of Enthusiasm," has somewhat overdrawn the portrait of these unfortunate but dangerous beings when labouring under the disease, which he thus defines : " It will be found that the elementary idea attached to the term in its manifold applications, is that of fictitious fervour in religion, rendered turbulent, morose, or rancorous by junction with some one or more of the unsocial emotions ; or, if a definition as brief as possible were demanded, we should say that fanaticism is enthusiasm inflamed by hatred. Fanaticism supposes three elements of belief : the supposition of malignity on the part of the object of our worship ; a consequent detestation of mankind at large, as the subjects of malignant power ; and then, a credulous conceit of the favour of Heaven shown to the few, in contempt of the rules of virtue."

Shaftesbury had already said, that " nothing besides ill-humour, either natural or forced, can bring a man to think seriously that the world is governed by any devilish or malicious power." Such a fearful conviction constitutes a clear case of *dæmonomania*. Patients labouring under that malady are ever prone to injure themselves and others, prompted, as they constantly avow, by an evil spirit ; but enthusiasts, who live in solitary mortification until a paroxysm of fanaticism draws them from their retreat, seldom or never meditate

mischief to others, or indeed that hatred to mankind which our author considers a feature of their condition. Society may become irksome, and may be shunned for ever, without a sentiment of hate. The gayest of the gay may be impelled by feelings more or less morbid to seek a voluntary endurance, to expiate real or imaginary offences, without experiencing a desire of a useless vindictive sentiment towards the former companions of their vices or follies. Extremes of depravity and contrition do not unfrequently meet; and it has been remarked in Eastern countries, where asceticism arose, that the gates of the most splendid and luxurious cities open upon desert wilds or mountainous solitudes, to which the penitent may flee from his former scenes of ambition and enjoyment.

Such enthusiasts, excepting when enjoying the beatitude of ecstatic exaltation, are more to be pitied than feared. Persecution would most probably drive them to a dangerous state of fanatic rage; and the noble philosopher whom I have already quoted, very justly observes, "They are certainly ill physicians in the body politic who would needs be tampering with these mental eruptions, and, under the specious pretence of healing the itch of superstition, and saving souls from the contagion of enthusiasm, should set all nature in an uproar, and turn a few innocent carbuncles into an inflammation and a mortal gangrene."

Enthusiasts are supposed by their followers to be gifted with the faculty of prophecy ; and it is somewhat strange that the ancients considered certain temperaments as best fitted for this inspiration. The atrabilious temperament took the lead ; and this melancholy state was to be increased by abstinence, mortification, and more especially rigid continence. The latter privation, indeed, was deemed indispensable for prophets ; and the Jewish rabbins inform us that Moses abandoned his wife Zipporah the very moment that he was prophetically inspired. A physical reason has been adduced to prove the necessity of a chaste life, which I here must be allowed to pass over ; but, upon the same principle, emasculation was considered as rendering man totally unfit for prophetic revelation, or indeed any holy inspiration ; and we find in the first of Deuteronomy that such subjects were not admissible to the service of the Temple.

Jesaias, and some other Jewish writers, have affirmed that Daniel belonged to that class of beings ; but it has been shown that the name of *Spado*, which he bore, merely gave him the high rank that eunuchs held at the Assyrian court. Potiphar bore the same title among the Pharaohs. Baruch Spinoza maintained that temperaments should vary according to the nature of the prophecy ; thus, a gay prophet would predict victory and happiness, a gloomy one misery and wars ;

peace and concord, if he is humane ; destruction and merciless events, if he were sanguinary : and, in support of his doctrine, he quotes the passage in Kings, where Elisha, when brought before Jehosaphat, called for a minstrel ere he predicted that victory should crown the arms of Judah.

Various artificial means have been resorted to at all periods to prepare the intellects for inspiration, by creating a heated imagination. Pliny informs us that, in his days, the root of the *Halicacabum*, supposed to be a species of hyoseyamus, was chewed by soothsayers. Christopher D'Acosta relates that the Indians employ a kind of hemp called *Bangue* for the same purpose ; and in St. Domingo their supposed prophets masticate a plant called *Cohoba*. The priestesses of Delphi were also in the habit of chewing laurel-leaves before they ascended the tripod, which it is stated was originally formed of a laurel-tree root with three branches. Sophocles calls the Sibyls *δαφνηφαγος*, laurel-eaters ; and thus Tibullus,

Vera cano, sic usque sacras innoxia lauros
Vescar, et æternùm sit mihi virginitas.

Auguries were drawn from the burning of the laurel-leaf. If it crackled and sparkled during combustion, the inference was favourable ; the reverse, if it was consumed in silence. Propertius alludes to this belief :

Et tacet extincto laurus adusta foco.

Yet so far from possessing exhilarating qualities, laurel-leaves were supposed to diminish the excitement produced by wine; and Martial affirms that the Roman ladies made use of them to drink large potations with impunity :

Fœtere multo Myrtale solet yino ;
Sed fallat ut nos, folia devorat lauri,
Merumque, cautâ fronde, non aquâ miscet.

From this circumstance may it not be inferred that the leaves given to the Pythia might have been those of the *Lauro-cerasus*, the effects of which are similar to those of prussic acid, producing vertigo, dizziness, and various convulsive symptoms? This tree was first observed by Bélon, who discovered it in his Eastern voyages in 1546; but it might have been well known to the ancients. We may thus account for the violent convulsions in which the priestesses of Apollo were thrown on these mystic occasions, and which were said to arise from the gas over which they were seated. Although the tree from which the leaves were plucked grew near the temple, and was the common *Laurus nobilis*, yet the leaves of the *Lauro-cerasus* might have easily been substituted on the occasion; since, always green and shining, they are not very unlike each other, and the flowers of both trees are pedunculate; and, no doubt, the priests well knew to what extent they could carry the dose to serve

their purposes ; possibly the modern preparation of *noyau* might have been a Pythian dram.

The effects of enthusiasm in rendering its victims insensible to all external agents is truly surprising, and cannot be better illustrated than by a relation of the horrors which the famous Convulsionists of Paris and other parts of France underwent, not only voluntarily, but at their most earnest prayer and solicitation.

This work of miracles, as it was called, was first performed by a priest of the name of Paris, in 1724, and, strange to say, the aberration continued for upwards of twelve years. Paris having departed this life in the odour of sanctity, (at least according to the conviction of the Jansenists, who had opposed with no little violence the famous bull *Unigenitus*,) the Appellants, for such they thought proper to denominate their sect, appealed to the remains of their beatified companion to operate miracles in support of their common cause. The Appellants were absurdly persecuted, therefore miracles became manifestations easy to obtain. Having succeeded in finding credulous dupes, the next step was to work their credulity into a useful state of enthusiasm. They therefore summoned all the sick, lame, and halt of their sectarians to repair to the tomb of St. Paris for radical relief. Crowds were soon collected round his blessed sepulchre. It is now generally supposed that animal magnetism was

resorted to in these curative operations, or rather religious ceremonies. Had not the means thus employed for the purpose been recorded and authenticated by the most irrefragable authorities, the sceptic might long pause before he would yield them credence.

The patient (a female) was stretched on the ground, and the stoutest men that could be found were directed to trample with all their might and main upon her body; kicking the chest and stomach, and attempting to tread down the ribs with their heels. So violent were these exertions, that it is related a hunchbacked girl was thus kicked and trampled into a goodly shape.

The next exercise was what they called the *plank*, and consisted in laying a deal board upon the patient while extended on the back, and then getting as many athletic men as could stand upon it, to press the body down; and in this endeavour they seldom showed sufficient energy to satisfy the supposed sufferer, who was constantly calling for more pressure.

Next came the experiment of the *pebble*, a diminutive name they were pleased to give to a paving-stone weighing two-and-twenty pounds, which was discharged by the operator upon the patient's stomach and bosom, from as great a height as he could well raise the weighty body. This terrific blow was frequently inflicted upwards of a hundred times, and with such vio-

lence, that the house, and the furniture of the room, vibrated under the concussion, while the astonished by-standers were terrified by the hollow sound re-echoed by the enthusiast at every blow.

Carré de Montgeron affirms that the *pebble* was not found sufficiently powerful, and the operator was obliged in one case to procure an iron fire-dog (*chenet*), weighing about thirty pounds, which was discharged as violently as possible on the pit of the patient's stomach at least a hundred times. This instrument having for the sake of curiosity been hurled against a wall, brought part of it down at the twenty-fifth blow. The operator further states, that he had commenced, according to the usual practice, by inflicting moderate blows, until he was induced by her lamentable entreaties to redouble his vigour, but all to no purpose; his strength was unavailing, and he was obliged to employ a more athletic surgeon, who fell to work with such energy that he shook the whole house. The Convulsionist, who was of the gentle sex, would not allow sixty blows she had received from her first doctor to be included in the calculation of the dose, but insisted upon having her whole hundred as prescribed. It further appears, that at each stroke the delighted enthusiast would exclaim in ecstasy, "Oh, how nice!" "Oh, how it does me good!" "Oh, dear brother, hit away—again—again!" For be it

known, these operators were called by the affectionate name of brothers, whose claims to fraternal affection were in the ratio of the weight of their kindness towards the sisterhood.

One of these young ladies, who was not easily satisfied, wanted to try her own skill, and jumped with impunity into the fire, an exploit which obtained her the glorious epithet of Sister Salamander. The names that these amiable devotees gave to each other were somewhat curious. They all strove to imitate the whining and wheedling of spoiled children, or petted infants; one was called *L'Imbécille*, another *L'Aboy-euse*, a third *La Nisette*, and they used to beg and cry for barley-sugar and cakes; barley-sugar signified a stick big enough to fell an ox, and cakes meant paving-stones. The excesses of these maniacs were at last carried to so fearful an extent, and their religious ceremonies were so debased by obscenities, that the police was obliged to interfere, and forbid these detestable practices; hence it was affirmed that the following somewhat impious notice was suspended over the church-door:

De par le Roi, défense à Dieu,
De faire miracle en ce lieu.

These lunatics, for such they must be considered, were not impostors. They had been worked to this degraded state by the plastic power of superstition, and implicit reliance was placed in their as-

sertions ; for, as Pascal said, “ we must believe people who are ready to have their throats cut.” Whether the Jansenist priests belonged to the same class, I leave to the reader to decide.

Cabanis, in his interesting work, “ *Rapports du Physique et du Moral de l’Homme*,” offers the following remarks on this most curious subject : “ Sensibility may be considered in the light of a fluid the quantity of which is determined, and which, when carried to certain channels in greater proportions than to others, must of course be diminished in the latter ones. This is evident in all violent affections, but more especially in those ecstasies where the brain and other sympathetic organs are possessed of the highest degree of energetic action, while the faculty of feeling and of motion—in short, the vital powers—seem to have fled from the other parts of the system. In this violent state fanatics have received with impunity severe wounds, which, if inflicted in a healthy condition, would have proved fatal or most dangerous ; for the danger that results from the violent action of external agents on our organs depends on their sensibility, and we daily see poisons, which would be deleterious to a healthy man, innocuous in a state of illness. It was by availing themselves of this physical disposition that impostors of every description and of every

country operated most of their miracles ; and it was by these means that the Convulsionists of St. Médard amazed weak imaginations with the blows they received from swords and hatchets, and which in their ascetic language they called *consolations*. This was the magic wand with which Mesmer overcame habitual sufferings, by giving a fresh direction to the attention, and establishing in constitutions possessed of great mobility a sense of action to which they had been unaccustomed. It was thus also that the *Illuminati* of France and Germany succeeded in destroying external sensations amongst their adepts, depriving them in fact of their relative existence."

In these phenomena we do not witness miracles or supernatural agency. Enthusiasts are simply maniacs. Like maniacs, their vital endowments are deranged ; they lose the faculty of feeling, of reasoning, of comparing, of associating their ideas ; their volition, their memory have fled, and all the functions of organic life are more or less disturbed. Rousseau never proved more clearly that his own intellectual faculties were occasionally impaired, than when he stated "that the state of reflection is unnatural, and that the man who meditates is a depraved animal."

Insanity may be divided into four species :

1st, *Monomania*, or *melancholy*, in which the delirium is confined to one or few objects.

2nd, *Mania*, where the delirium embraces a variety of impressions, and is accompanied with violence.

3rd, *Dementia*, or insanity in the full acceptance of the word, where the senses are totally bewildered, and the faculty of thinking destroyed.

4th, *Imbecility*, or *idiotcy*, where, from imperfect organisation, ratiocination cannot be correct.

To the first of these categories enthusiasts generally belong. Delirium, or wandering, is to a certain extent applicable to all, being a want of correspondence between judgment and perception. Locke and Condillac characterise madness as a *false judgment*, or a disposition to associate ideas incorrectly, and to mistake them for truths. Hence it is observed by Locke, that "Madmen err, as men do that argue right from wrong principles." Dr. Beattie refers madness to *false perception*; and Dr. Mason Good, justly remarks, that "the perceptions in madness seem, for anything we know to the contrary, to be frequently as correct as in health, the judgment or reasoning being alone diseased or defective."

I hope that I may not be accused of *materialism* when I venture to affirm that all these enthusiasts labour under a physical disease; but whether this state was originally brought on by a morbid condition of the intellectual or the impassioned fa-

culties of the mind, or, in other words, whether a diseased state of the mind brought on a diseased state of the body, I shall not at present venture to decide, as the disquisition would be foreign to the nature of this work, and lead us into investigations of little interest to the generality of readers.

In the German Psychological Magazine we meet with a curious case of a patient who believed that he was supernaturally endowed with the power of working miracles. The man was a *gend'arme* of the name of Gragert, of a harmless and quiet disposition, but rather of a superstitious turn of mind. From poverty, family misfortunes, and severe military discipline, a series of sleepless nights and a mental disquietude were brought on that, according to his own report, nothing could dissipate but a perusal of pious books. In reading the Bible he was struck with the book of Daniel, and was so much pleased with it, that it became his favourite study; from that moment the idea of miracles so strongly possessed his imagination, that he began to believe that he could perform some himself. He was persuaded more especially that if he were to plant an apple-tree with a view of its becoming a cherry-tree, such was his power that it would bear cherries. He was wont to answer every question correctly, except when the subject concerned miracles, in regard to which he ever entertained his old notions; adding, however,

that he would relinquish this thought if he could be convinced that the event of his trials did not correspond with his expectations.

That many enthusiasts, although incurable in their peculiar aberration, have possessed some amiable qualities, is undeniable. Such rare occurrences remind one of the curious case of madness recorded by Tiedemann of a lunatic of the name of Moses, who was insane on one side, and who observed his insanity with the other; his better half constantly rebuking his worse half for its absurdities. This case was certainly typical of the married state.

In vain have physicians endeavoured to break through this morbid catenation of incongruous ideas by diversions, or what the French call *distractions*, which in general answered to our literal translation of the word, and *distracted* their patients. Dramatic performances were once allowed in a mad-house near Paris; but the violence of the maniacs, the moroseness of the melancholy, and the stupidity of the idiots, rendered the exertions of the actors perilous to some, and idle to all. Mr. D'Esquirol once took one of his patients to a play, and the man swore that every performer who came on was making love to his wife; and a young lady, placed in a similar situation, exclaimed that all the people were going to fight about her. Jealousy and vanity were, no doubt, the ruling passions in both these cases.

Travel has been recommended both by the ancients and the moderns. Seneca on this subject quotes Socrates, who replied to a melancholy wight who complained that his journeys had afforded him no amusement, "*I am not surprised at it, since you were travelling in your own company.*"

The contagion of enthusiasm is a marvellous fact. Pausanias relates that the malady of the daughters of Proetus, who ran about the country fancying that they were transformed into cows, was common amongst the women of Argos. Plutarch states that a disease reigned in Miletium, in which most of the young girls hung themselves; recent observations have confirmed this singular circumstance. Dr. Deslages, of St. Maurice, relates that a woman having hanged herself in a neighbouring village, most of her companions felt an invincible desire to follow her example. Primerose and Bonet tell us that at one period it was found difficult to prevent the young girls in Lyons from casting themselves into the river. Simon Goulard has recorded the prevalent madness amongst the nuns of the States of Saxony and Brandenburg, and which soon extended its influence to Holland, during which these religious ladies "predicted, capered, climbed up walls, spoke various languages, bleated like sheep, and amused themselves by biting each other." History has recorded the horrible judicial murder of Urbain Grandier, at Laudun, who

was sacrificed for bedevilling a nunnery. The recent gift of tongues amongst the *Irvinians* is still in full vigour, and the *Southcotians* are still on the look-out in London, as the *Sebastianists* are in Lisbon.

Addison has remarked that an enthusiast in religion is like an obstinate clown, and a superstitious man like an insipid courtier. On this subject he quotes the following old heathen saying recorded by Aulus Gellius, *Religentem esse oportet, religiosum nefas*; for, as the author tells us, Nigidius observed upon this passage, that the Latin words which terminate in *osus* generally imply vicious characters, or the having any quality to excess. That we should enthusiastically admire all that is holy, sublime, or endowed with uncommon superiority in religion, in poetry, in the fine arts, is not only justifiable but praiseworthy. Genius cannot exist without a certain degree of fervour; its inspiration is a gift divine, naturally associated with a religious feeling. The man thus inspired must bend in humble admiration before the wondrous harmony that surrounds him. The poet, the painter, the musician, can only seek excellence by studying primitive perfection. Nothing that is not natural can be truly sublime or beautiful. A rigid observation of nature can alone lead to superiority, and we can only be taught to create by endeavouring to imitate the beauties of the creation. How

distant are these generous feelings from the low grovelling prejudices of bigotry. We admire perfection even in our enemies ; and Erasmus was not a truant to his faith when, transported with Socrates's dying speech, he exclaimed, "O Socrates ! I can scarce forbear kneeling down to thee, and praying,

Sancte Socrates, ora pro nobis."

EARLY RISING.

THE celebrated physician Bezerchemere used every morning to awaken Noshervann, and descant on the benefits of early rising. As he was once going to court, agreeable to custom, before day-light, a thief robbed him of his turban. The emperor enquired the reason of his being bare-headed, and, on hearing his loss, taunted him by saying, "Didst thou not ever tell me that the benefits of rising early were unappreciable? see what thou hast got by being up so soon." "The thief," replied Bezerchemere, "was certainly up before me, and therefore reaped the benefit of my doctrine."

MEDICINAL EFFECTS OF WATER.

AMONGST the various means resorted to by quackery to speculate upon the credulity of mankind, simple river or spring water, coloured and flavoured with inert substances, has not been the least productive; and many a time the Thames and Seine have been fertile sources of supposed invaluable medicines. Sangrado's doctrines on aqueous potations have long prevailed in the profession; and it has been stoutly maintained that a water diet can cure the gout and various other diseases. That relief, if not cures, have been obtained by this practice, there cannot be the least doubt. Are we to attribute these favourable results to the effects of the imagination, the beneficial efforts of nature, or the salutary abstinence which this prescription imposed? Possibly they all combined to assist the physician's efforts, or rather aid his effete treatment. Cold water and warm water have in turn been praised to the very skies by their eulogists, and become the subject of ridicule and persecution on the part of more spirited practitioners.

In surgery, water has ever been considered of

great utility ; it, no doubt, was instinctively used by man to clean and heal his wounds. Patroclus, having extracted the dart from his friend Eury-pylus, washes the wound ; and the prophet Elisha prescribes to Naaman the waters of Jordan. Rivers had various qualities, and were supposed to prove as different in their action on the œconomy as the mineral springs, which, from time immemorial, have been resorted to. These effects may in fact not be altogether doubtful ; for, although these salutary streams may not possess sufficient active ingredients to be recognised by chemical tests, yet we know that substances which appear perfectly inert may prove highly active and effectual when combined and diluted naturally or artificially. Moreover, in the effects of watering-places on the invalid or valetudinarian, we must not forget the powerful influence of change of air and habit, the invigorating stimulus of hope, and the diversion from former occupations. To these auxiliaries many a remedy has owed its high reputation ; and probably when Wesley attributed his recovery to brimstone and supplication, he in a great measure might have considered rest from incessant labour the chief agent in his relief. The exhilarating effects of the picturesque site of many of these salutary places of resort is universally acknowledged. Montaigne, Voltaire, Alfieri, acknowledged their influence on the imagination.

Petrarch's inspiration flowed with the waters of Vaucluse, some of Sevigné's most delightful letters were written at Vichy, and Genlis and Staël were particularly happy in their epistolary elegance at Spa and Baden. Many ancient coins and inscriptions bear witness to these salutary properties.

We owe to accident many valuable discoveries in medicine. It is said that several Indians, having used the waters of a lake in which a cinchona-tree was growing, experienced the benefit which led to the use of the Peruvian bark ; and the thermal properties of the baths of Carlsbad were first made known by the howling of one of Charles the Fourth's hounds, that had fallen in them in a hunt. It has been also observed, in various countries, that particular waters produced various morbid affections ; and to this cause have been attributed goitres, cretinism, calculi, and other distressing diseases. The ancients dreaded the impurity of their rivers. The Romans boiled their water in extensive *thermopolia*, where not only potations were drunk hot, but occasionally refrigerated with ice and snow, and, when thus prepared, called *decocta*. Juvenal and Martial refer this custom to the Greeks. Herodotus informs us that the Persian monarchs were accompanied on their expeditions by chariots laden with silver vases filled with the water of the *Choaspes* that

had been boiled, and which was solely destined for the king's use: Athenæus tells us that it was light and sweet.

This real or supposed efficacy was scarcely discovered before it became the domain of priests; and common rain or river water became valuable and sanctified when blessed by them: hence the introduction of lustral water. The fluid extracted from the gown of Mahomet is the sacred property of the Sultan. The moment the fast of the Ramazan is proclaimed, this holy vestment is drawn from a gold chest, and, after having been kissed with due devotion, plunged in a vase of happy water, which, when wrung from the garment, is carefully preserved in precious bottles, that are sent by the monarch as valuable presents, or sold at exorbitant prices as cures for any and every disease. Thus were the good effects of ablution, especially in wounds, attributed to some secret charm or quality conferred upon it by clerical benediction or the legitimacy of princes. When a quack of the name of Doublet cured the wounded at the siege of Metz in 1553, the water he used was considered to have been of a mystic nature; and Brantome describes his treatment in the following words: "Durant le susdit et tant mémorable siège, était en la place un chirurgien nommé Doublet, lequel faisait d'étranges cures avec du simple linge blanc, et belle eau claire venant de la fontaine ou du puit; mais il s'aidait de sorti-

lèges et paroles charmées, et un chascun allait à luy." This Doublet, no doubt, was acquainted with an ingenious treatise on gun-shot wounds, written by Blondi in 1542, in which he strongly recommended the use of cold water; but, as his recommendation was not founded on any miraculous quality, he was forgotten, while Doublet was considered a supernatural being. Previous to this simple and sagacious method of healing wounds, various curious applications were in high repute; more especially the oil of kittens, which the celebrated Paré discovered, to his great delight, was prepared by boiling live cats, coat and all, in olive oil, and was until then a valuable secret preparation, called *oleum catellorum*, and its use, with that of other nostrums, was known under the name of *secret dressing*.*

This simple mode of dressing wounds, especially those that were inflicted by fire-arms, was a great desideratum; for, up to this era in surgery, these injuries were healed by the application of scalding oil or red-hot instruments, under the im-

* Oil is, however, a useful application to wounds in warm climates. During the retreat of our troops after the battle of Talavera, I found the wounds of many of our men, that had not been dressed for three or four days, pullulating with maggots. This was not the case with the Spanish soldiers, who, to prevent this annoyance (which was more terrific than dangerous), had poured olive oil upon their dressings. I invariably resorted to the same practice when I subsequently had to remove the wounded in hot weather.

pression that they were of a poisonous nature. Paré was one of the first army-surgeons who exploded this barbarous practice. Having, according to his own account, expended all his boiling oil, he employed a mixture of yolk of egg, oil, and turpentine, not without the apprehension of finding his patients labouring under all the effects of poison the following day ; when, to his great surprise, he found them much more relieved than those to whom the actual cautery had been applied. In more recent times, armies have been unjustly accused of making use of poisonous balls ; and this absurd charge was brought against the French after the battle of Fontenoy, when the hospital fever broke out among the wounded crowded in the neighbouring villages. Chewing bullets was also considered a means of imparting to them a venomous quality. Lead and iron, the metals of which these projectiles were usually cast, were also deemed of a poisonous nature. A sort of aristocratic feeling seemed to obtain in those days ; and it is related that two Spanish gentlemen had procured gold balls to fire at Francis I. at the battle of Pavia, that so noble and generous a prince should not fall by the vile metal reserved for vulgar people ; and, in the adverse ranks, La Chatarguene, a noble of the French court, had prepared bullets of the same costly material for the reception of Charles V. It was under the impression of this poisonous nature

of wounds, that individuals of both sexes, called suckers, followed armies, and endeavoured to extract the venom by suction; and the records of chivalry give us instances of lovely damsels who condescended to perform this operation with their lovely mouths upon their *damoiseaux*; and Sibille submitted the wounds of her husband, Duke Robert, to a similar treatment: indeed, these suckers were chiefly females. May not this practice be the origin of the term *leech*, applied in ancient times to medical men? Leech-craft was the art of healing. Thus Spenser:

And then the learned leech
His cunning hand 'gan to his wounds to lay,
And all things else the which his art did teach.

To this day, the custom of sucking wounds prevails among soldiers; and there is every reason to hope, from the experiments of the late Sir David Barry, that the exhaustion produced by cupping-glasses will be found of essential service in all venomous wounds. This practice of suction, no doubt, was known in Greece; Machaon performed it at the siege of Troy. The mothers and wives of the ancient Germans had recourse to the same process. In India the suction of wounds constitutes a profession. It was by this means that the *Psylli* cured the bite of serpents; and it is related of Cato, that his abhorrence of the Greek surgeons was such, that he directed *Psylli* to follow the Roman armies.

Water affords a beautiful illustration of that indestructibility with which the Creator invested matter for the preservation of the world he formed from elementary masses, and appears to have existed unchangeable from the commencement of the universe. Its constituent parts are not broken into by any atmospheric revolution ; they continue the same, whether in the solid ice, the fluid state of a liquid, or the gaseous form of a vapour. Its powers are undiminished, whether in the wave or the steam ; the most effective agent in the hands of man to promote that welfare and happiness which his own errors deprive him of, frequently bringing on those calamities that his perversity attributes to the will of the Omnipotent. Water is the same in the atmosphere as on the earth, and falls in the very same nature as it ascends ; electricity has no other influence upon it than that of hastening its precipitation. Chemical agents, however powerful, can only decompose its elementary principles upon the most limited scale. The heterogeneous substances with which water may occasionally be alloyed must be considered as purely accidental.

The homogeneous characters of this fluid admit of no alteration, and, like atmospheric air, are still obtained as pure most probably as when they first emerged from chaotic matter. The same principles are found in the clouds, the fogs, the dews, the rain, the hail, and the snow.

For the preservation of the world it was indispensable that water should be endowed with the property of ever retaining its fluid form, and in this respect become subject to a law different from that of other bodies, which change from fluid to solid. This is a deviation from a general decree of Nature. Were it not for this wise provision of the Creator, the world would shortly have been converted into a frozen chaos. All bodies contract their dimensions, and acquire a greater specific gravity by cooling; but water is excepted from this law, and becomes of less specific gravity, whether it be heated, or cooled below $42^{\circ} 5'$. But for this exemption, it would have become specifically heavier by the loss of its caloric, and the waters that float on the surface of rivers would have sunk as it froze, until the beds of rivers would have been filled up with immense masses of ice. From the observations of Perron, there is reason to believe that the mountainous accumulations of ice that have hitherto arrested the progress of polar navigators have been detached from the depths of the ocean to float upon its surface. This circumstance would account for the difference of temperature of the sea according to its depth. The experiments of Perron, made with an instrument of his own invention, which he called the thermobarometer, gave the following results :

1st, The temperature of the sea upon its surface, and at a distance from shore, is at the meri-

dian lower than that of the atmosphere in the shade ; much more elevated at midnight, but in a state of equilibrium morning and evening.

2nd, The temperature rises as we approach continents or extensive islands.

3rd, At a distance from land, the temperature of the deep parts of the sea is lower than that of the surface, and the cold increases with the depth. It is this circumstance which led this ingenious philosopher to conclude that even under the equator the bottom of the sea is eternally frozen.

Humboldt is of a contrary opinion, and maintains that the temperature is from two to three degrees lower in shallow water ; and he therefore is of opinion that the thermometer might prove of material use to navigators. He attributes this diminution of temperature to the admixture of the lower bodies of water with that of the surface. Who is to decide between these two ingenious experimentalists ? “ *Experientia fallax, judicium difficile.*” The curious reader may consult in this investigation the tables of Forster in Cook’s second voyage, those of Lord Mulgrave when Captain Phipps, and various other navigators.

The salutary medicinal effects of sea-bathing are generally acknowledged, although too frequently recommended in cases which do not warrant the practice ; in such circumstances they often prove

highly prejudicial. The ancients held sea-water baths in such estimation, that Lampridius and Suetonius inform us that Nero had it conveyed to his palace. As sea-bathing is not always within the reach of those who may require it, artificial sea-water has been considered a desirable substitute; and the following mode of preparing it, not being generally known, may prove of some utility. To fifty pounds of water add ten ounces of muriate of soda, ten drachms of muriate of magnesia, two ounces of muriate of lime, six drachms of sulphate of soda, and the same quantity of sulphate of magnesia. This is Swediaur's receipt. Bouillon Lagrange, and Vogel, recommend the suppression of the muriate of lime and sulphate of soda, to be replaced with carbonate of lime and magnesia; but this alteration does not appear necessary, or founded on sufficient chemical grounds for adoption.

Sea-water taken internally has been considered beneficial in several maladies; and, although not potable in civilised countries, it is freely drunk by various savage tribes. Cook informs us that it is used with impunity in Easter Island; and Schouten observed several fishermen in the South Sea drinking it, and giving it to their children, when their stock of fresh water was expended. Amongst the various and capricious experiments of Peter the Great, an edict is recorded ordering his sailors to give salt water to their male children, with a view of accustoming them to a beverage which might

preclude the necessity of laying in large stocks of fresh water on board his ships! The result was obvious : this nursery of seamen perished in the experiment. Russel, Lind, Buchan, and various other medical writers, have recommended the internal use of sea-water in scrofulous and cutaneous affections ; but its use in the present day is pretty nearly exploded.

PROVERBS AND SAYINGS REGARDING
HEALTH AND DISEASE.

AN ague in the spring is physic for a king.

Agues come on horseback, but go away on foot.

A bit in the morning is better than nothing all day.

You eat and eat, but you do not drink to fill you.

An apple, an egg, and a nut, you may eat after a slut.

Poma, ova, atque nuces, si det tibi sordida, gustes.

Old young and old long.

They who would be young when they are old, must be old when
they are young.

When the fern is as high as a spoon,

You may sleep an hour at noon.

When the fern is as high as a ladle,

You may sleep as long as you are able.

When fern begins to look red,

Then milk is good with brown bread.

At forty a man is either a fool or a physician.

After dinner sit awhile, after supper walk a mile.

After dinner sleep awhile, after supper go to bed.

A good surgeon must have an eagle's eye, a lion's heart, and a
lady's hand.

Good kale is half a meal.

If you would live for ever, you must wash milk from your liver.

Vin sur lait, c'est souhait; lait sur vin, c'est venin.

Butter is gold in the morning, silver at noon, and lead at night.

He that would live for aye, must eat sage in May.

Cur moriatur homo, cui salvia crescit in horto?

After cheese comes nothing.

An egg and to bed.

You must drink as much after an egg as after an ox.

He that goes to bed thirsty rises healthy.

Qui couche avec la soif, se leve avec la santé.

One hour's sleep before midnight is worth two hours' after.

Who goes to bed supperless, all night tumbles and tosses.

Often and little eating makes a man fat.

Fish must swim thrice.

Poisson, gorret, et cochon vit en l'eau, mort en vin.

Drink wine and have the gout, drink no wine and have it too.

Young men's knocks, Old men feel.

Quæ peccamus Juvenes, ea luimus Senes.

Go to bed with the lamb, and rise with the lark.

Early to bed, and early to rise,

Makes a man healthy, wealthy, and wise.

Wash your hands often, your feet seldom, and your head never.

Eat at pleasure, drink by measure.

Pain tant qu'il dure, vin à mesure.

Cheese is a peevish elf,

It digests all but itself.

Caseus est nequam,

Quia digerit omnia se quàm.

The best physicians are Dr. Diet, Dr. Quiet, and Dr. Merryman.

Si tibi deficient medici, medici tibi fiant

Hæc tria; mens læta, requies, moderata diæta.

Drink in the morning staring,

Then all the day be sparing.

Eat a bit before you drink.

Feed sparingly and dupe the physician.

Better be meals many than one too many.

You should never touch your eye but with your elbow.

Non patitur ludum fama, fides, oculus.

The head and feet keep warm, the rest will take no harm.

Tenez chaud le pied et la tête, au demeurant vivez en bête.

Qui ne boit vin après salade, est en danger d'être malade.

Cover your head by day as much as you will, by night as much as you can.

Fish spoils water, but flesh mends it.

Apples, pears, and nuts spoil the voice.

Quartan agues kill old men and cure young.

Old fish, old oil, and an old friend.

Pesce oglio ed amico vecchio.

Raw pullet, veal, and fish, make the churchyard fat.

Of wine the middle, of oil the top, of honey the bottom.

Vino di mezzo, oglio di sopra, e miele di sotto.

The air of a window is the stroke of a cross-bow.

Aria di finestra, colpo di balestra.

Piscia chiaro, ed incaca al medico.

When the wind is in the east, it's neither good for man nor beast.

A hot May makes a fat churchyard.

That city is in a bad case, whose physicians have the gout.—

Hebrew Proverb.

When the sun rises, the disease will abate.*

If you take away the salt, throw the meat to the dogs.

Splen ridere facit, cogit amare jecur.†

* A Hebrew proverb originating from a tradition that Abraham wore a precious stone round his neck, which preserved him from disease, and which cured sickness when looked upon. When Abraham died, God placed this stone in the sun.

† The ancients considered the spleen the seat of mirth, and the liver the organ of love; hence their old proverb.

Lever à cinq, diner à neuf,
Souper à cinq, coucher à neuf,
Font vivre dans nonante neuf.

*Surge quintâ, prande nonâ, cæna quintâ, dormi nonâ, nec est
morti vita prona.*

Hunger's the best sauce.

Optimum condimentum fames.

Plures occidit gula quàm gladius.

Qui a bu, boira. Ever drunk, ever dry.

Vinum potens, vinum nocens.

The child is too clever to live long.

Præcocibus mors ingeniis est invida semper.

Le chant du cocq, le coucher du corbeau,
Préservent l'homme du tombeau.

Bitter to the mouth, sweet to the heart.

*Paulò deterior, sed suavior potus est cibus; meliori quidem, sed in-
grato, præferendus est.*

Après la soupe, un coup d'excellent vin
Tire un écu de la poche du médecin.

THE NIGHT-MARE.

THE Night-mare or Ephialtes, *incubus*, from ἐφάλλομαι, “to leap upon,” and *incubo*, “to lie upon,” may be considered a sympathetic affection of the brain during our sleep, generally arising from a derangement in the digestive functions. We therefore observe it after a heavy supper, or the use of any article of food of difficult digestion. It is to these circumstances more than to the “unusual loss of volition,” which some physiologists consider as its cause, that we are to attribute this unpleasant perturbation of our repose, which impresses the sleeper with the idea of some living being pressing upon the chest, inspiring terror, impeding respiration, and subduing all voluntary action that might endeavour to remove the unwelcome visitor.

It has been observed that persons of a melancholy and contemplative disposition are more subject to it than the gay and the vivacious. Sedentary employment and anxiety of mind often bring it on ; and it has been noticed in the *nostalgia*, or regret of home, in soldiers and sailors. The sense

of apprehension remains after the sufferer is awakened, and the fluttering of the heart and quick pulse are observed for some time after, while drops of cold perspiration frequently trickle down his brow. When the night-mare is the result of too much repletion, it is possible that its symptoms denote a pressure of the loaded stomach on the solar plexus.

It is said that the *night-mare* derives its name from *Mara*, an evil spirit of the Scandinavians, which, according to the Runic theology, seized men in their sleep, and deprived them of the powers of volition. Our old Anglo-Saxon name for the disease was *Elf-Sidenne*, or elf-squatting; hence the popular term "hag-ridden."

There is a variety of the malady which makes its attack by day, and when waking: it has been called the day-mare, or *ephialtes vigilantium*. This affection, although uncommon, has been noticed by Forestus, Rhodius, Sauvages, and Good. Forestus has known it to return periodically like an intermittent fever.

It is not always that the patient experiences unpleasant sensations in these nocturnal attacks, which were not unfrequently of a curious nature. The ancients thought that these intruders were sometimes sportive Fauns; hence Pliny calls the affection *ludibria Fauni*. At a subsequent period superstition replaced the Fauns

by *Incubi*, or evil spirits, who visited the earth to destroy virtuous women; and it was once gravely discussed by the Sorbonne, whether the offspring of such an union should be considered human, or the fair lady's reputation injured by the involuntary act of giving a young incubus to the world. The absurd stories of the pranks of the *Succubi* and *Incubi* are well known.

Ephialtes has been known to be epidemic, and has attacked numbers at a time. Cælius Aurelianus informs us that Silimachus, a disciple of Hippocrates, observed the phenomena in Rome, when the disease generally proved fatal. It is more than probable that in these cases the night-mare was merely symptomatic of other complaints. A French physician, Dr. Laurent, however, has related a very curious instance of a species of night-mare attacking an entire regiment; he thus relates the singular occurrence :

“The first battalion of the regiment Latour d’Auvergne, of which I was the surgeon, was garrisoned at Palmi, in Calabria, when we received a sudden order at midnight to march with all possible speed to Tropea; a flotilla of the enemy having appeared off the coast. It was in the month of June; we had a march of forty miles of the country, and only arrived at our destination at seven o’clock the following even-

ing, having scarcely halted during those thirty-one hours, and suffered considerably from the heat of the sun. On our arrival the men found their rations cooked and their quarters prepared ; but, having arrived the last, our regiment had the worst accommodation, and eight hundred men were pent up in a building scarcely capacious enough for half the number. The soldiers were in consequence much crowded, and slept upon the straw without any bedding, and most uncomfortably. The building was an abandoned monastery ; and the inhabitants warned us that we should not be able to occupy it quietly, as it was haunted every night. We laughed at their superstitious fears, but were much amazed when, towards midnight, we heard loud cries, and the soldiers rushed tumultuously, and in evident terror, out of their rooms. Interrogated as to the causes of this alarm, they all affirmed that the devil was in the abbey ; that they had seen him enter in the shape of a large black dog, that had jumped upon their breasts and disappeared. To convince them of the absurdity of their fears was of no avail ; not a single man could be persuaded to return to his quarters, and they wandered about the town until day-break. The following morning I questioned the most steady non-commissioned officers and the oldest soldiers ; and though under ordinary circumstances they were strangers to fear,

and never gave credit to any tales of supernatural agency, they assured me that the dog had weighed them down and nearly suffocated them. We remained that day in Tropea, and had no other quarters to occupy but the same monastery, and the soldiers would only take up their residence on the condition that we should remain with them: the men retired to sleep—we watched; all was quiet until about one in the morning; when they awoke in the same terror, and fled the building in dismay. We had looked out most attentively, but could not perceive the cause of this commotion. The following day we returned to Palmi; and, although we marched over a great part of Italy, and were frequently equally crowded and uncomfortable, a similar scene never recurred.”

Dr. Laurent very judiciously attributes this singular attack to the pernicious local influence of some deleterious gas, and the very crowded state the men slept in. It is also probable that they did not take off their accoutrements, and lay down with their belts on: might they not also have eaten some unwholesome fruit upon the line of march, for it was in the month of June, when various berries grow in abundance along the road-side?

Hippocrates's theory of the night-mare was, that, during our sleep, our volition being suspended, the soul, still awake, watches over all the functions

of the body. It is rather odd that the animal that most persons pretend to have thus annoyed them is a long-haired black dog. Forestus assures us that it was a similar visitor that tormented him in his youth. This circumstance can only be attributed to vulgar superstition and tradition. Dubosquet has preceded his Treatise on Ephialtes with the engraving of a large monkey who had perplexed a young lady he attended; the monkey most probably came on horseback, as his steed is also delineated looking over the sleeping victim.

Various medicines have been recommended to prevent these attacks; amongst others, saffron and peony: and several learned commentators have endeavoured to prove and disprove that they were only specific in the form of an amulet. Zacutus Lusitanus recommends aloes, and his advice is perhaps as good a one as could be given. The ancients attributed many powerful effects to saffron, and, amongst other properties, it was considered an effective narcotic, and was said to occasion violent headaches. Curious anecdotes are related of its effects. Amatus Lusitanus having exhibited this medicine to accelerate a tardy accouchement, the woman was delivered of two yellow daughters; and Hertodt, in his work called Crocology, relates that, having tried it on a bitch, all her pups were of a similar colour. The ancients called saffron the king of plants, the vegetable

panacea, and the soul of the lungs. In modern times we do not recognise any peculiar property in this production; and in Spain and Italy it is used as a condiment with perfect impunity. Peony was also deemed a valuable remedy, when gathered as the decreasing moon was passing under Aries: the slit root being then tied round the neck of an epileptic person, he was forthwith cured. How difficult it is to steer the vessel of our understanding between those shoals so admirably pointed out by Dugald Stewart: "Unlimited scepticism is as much the child of imbecility as implicit credulity."

Medical writers have divided the night-mare, according to its phenomena, into complete, incomplete, mental, and bodily. The complete night-mare, in which the suspension of the functions had been so powerful, has been known to prove fatal. In the incomplete, we fancy ourselves placed in a peculiar situation, opposed by some unexpected obstacle, and all our efforts seem of no avail to extricate ourselves from our difficulties. There is an incubus, called indirect, in which the dreamer is not the individual arrested in his movements; but he is impeded in his progress by the stoppage of his horse, his carriage, his ship, which no power can propel. In the mental or intellectual night-mare, the flow of our ideas is embarrassed, all the associations of our very thoughts appear to be singularly unconnected; we think in an unin-

telligible language ; we write, and cannot decipher our manuscript : all is a mental chaos, and no thread can lead us out of the perplexing labyrinth. In the corporeal ephialtes we imagine that some of our organs are displaced, or deranged in their functions. One man fancies that a malevolent spectre is drawing out his intestines or his teeth : a patient of Galen felt the cold sensation of a marble statue having been put into bed with him. These sensations, however, are nothing else than the actual ones we experience at the time. Thus Conrard Gesner fancied that a serpent had stung him in the left side of the breast ; an anthrax soon appeared upon the very spot, and terminated his existence. Arnauld de Villeneuve imagined that his foot had been bitten, and a pimple which broke out on the spot soon degenerated into a fatal cancerous affection. Corporeal night-mare may therefore be simply considered as a symptom of disease, and not as a mysterious forewarning.

The cold stage of fever that often invades us in our sleep is the natural forerunner of the malady. This was the case with Dr. Corona, the physician of Pius VI, who upon two occasions was attacked with typhus fever, ushered in by a distressing dream or incubus. These physical phenomena only strengthen the opinion, that in our sleep we are equally alive to mental impressions

and bodily sufferings; and that, correctly speaking, there is no suspension of our intellectual faculties of perception, nor is there any interruption in the susceptibilities of our relative existence. The various doctrines regarding dreams illustrate this position.

INCUBATION OF DISEASES.

THE term 'incubation' in its rigid sense applies to the act of hatching eggs, either naturally or artificially. It has however been adopted by physicians to denote that state of predisposition to disease, in which the germ of the malady lurks, latent and unperceived by the inexperienced observer. Too frequently the individual who is thus menaced is totally unaware of his condition. So far from being depressed in spirits, his hopes are more sanguine, and his future projects more industriously formed than usual. At other times, on the contrary, he labours under a load of despondency which he cannot explain, and his gloom seems to anticipate his destinies. This presentiment has oftentimes been singularly prophetic. Moreau de St. Remy relates the case of one of his most intimate friends, who visited him, saying, "I come to die near you." He was apparently in perfect health, but the prediction too soon proved true.

It is no doubt probable, that in these cases the influence of the mind labouring under these fatal impressions brings about, by its all-powerful sym-

pathetic power on our functions, the expected yet dreaded event.

Incubation is observed in many contagious affections; and in hydrophobia its duration is amazing, the dreadful malady developing itself years after the original accident. In mental diseases, aberrations of the intellectual faculties are noticed long before the patient can be pronounced insane; oddities, as they are called, are frequently the precursors of mania.

The ancient Greeks and Egyptians used the term 'incubation' in another sense. With them it expressed the religious ceremony of sleeping in the temples of the gods, to be inspired with the means of relieving their sufferings. Nothing can express this superstitious rite more forcibly than the following letter from Aspasia to Pericles, recorded by one of the scholiasts of *Ælian*.

"Aspasia to Pericles, greeting. Podalirius! Podalirius, to whom Love taught the art of healing, and who in return didst consecrate thine art to Love, I return thee my thanks. Athens will once more see me beauteous! I shall have lost none of my attractions, and Pericles shall find in his Aspasia all that he once held dear! Podalirius, I return thee my thanks; and thou, Pericles, be grateful to my benefactor. I did not wish to write to thee until I was certain that I had been cured. I shall relate to thee my voyage. I punctually followed the instructions

of Nocrates, that wise and enlightened physician. I first repaired to Memphis, where I visited, but without success, the temple of Isis. I there beheld the goddess, and her son Orus, seated on a throne, supported by two lions. The *Sebestus** grew round her shrine! Incense was burnt in the morning, myrrha during the day, and cypris at eve. I was assured that young Alexander had come to this temple not long before to indulge in a holy contemplation, and learn by inspiration the means of curing his friend Ptolemy: his supplications were heeded. I also slept in the temple, but found no relief. This misfortune, alas! was attributed to my incredulity. I took my departure, and repaired to Patras. There I saw in her temple the divine Hygeia; not as she was represented by Aristophanes, when she relieved Plutus, sweet and graceful, clothed in an aerial robe and a short tunic, and holding in her hand a cup of *Musa*, whence a serpent was seen to spring, but she appeared to me in the form of a mysterious pentagon. I first paid a devout visit to the fountain; and while I deposited my offerings at the feet of the goddess, a mirror was floating on the surface of the waters upon which I gazed by order of the priests, but I was not cured! Thence I went to sleep at Pergania and at Hercyna. But the gods seemed to slumber when Aspasia

* *Cordia Sebestena*; according to some, the *C. Myxa* L.

slept! On a sudden the name of Podalirius struck mine ear! I was informed that his temple was at Lacera. I instantly sought it; and, on my arrival, bathed in the Althonus. After the bath, I was anointed with the perfumed balsams that our friend Sosinius had given me in the temple of Mercury the day I left Athens. I then put up my prayers to deserve the favour I implored from the god. At night-fall I sought repose on the skin of a ram close to the statuary pillar. I soon found myself in that state when we are no longer wide awake, but when sleep has not yet lulled our senses to repose. Methought that a celestial light was shed around me. Æsculapius appeared to me with his two daughters; and, from the clouds that surrounded him, he promised me my pristine health. I soon after fell into a profound sleep; but towards the break of day I beheld Cypris—Cypris who was always the friend of Podalirius: she came herself! I recognised her, although she had assumed the form of a gentle dove. Yes, Cypris came to cure me. Podalirius! Æsculapius! Cypris! each day shall you be thanked by Aspasia and by Pericles.

“I must now relate to thee the vision of a Daunian who slept near me. She suffered from an affection of her breast, and this she dreamed:—She beheld the young god Harpocrates lying on leaves of lotos, and covered with ban-

dages from the head to the feet. He appeared weak and emaciated; he cried like an infant, supplicating the poor woman to nurse him. Soon after, she dreamt that a lamb came to seek his sustenance from her bosom. The dream was fulfilled,—it clearly indicated the use of a certain plant; but, until it could be obtained, the Daunian was advised to eat nothing but stewed raisins. Learn that here various names are given to various inspirations. The last dream I have related is called *allegorical*. When a dream prescribes a certain remedy, it is named *theôrematic*. Here are many dreams: wise Pericles, thou art perhaps smiling at them; but what is not visionary is my perfect recovery, and my love for thee. Farewell!"

Although this letter of Aspasia is an evident fiction, yet it gives an excellent, though a romantic description of the incubation of the ancients. Aspasia was supposed to be labouring under one of the most vexatious disorders that can affect a pretty woman,—an eruption in the face; hence the gods sent her a mirror, that her devotion might be increased by her unsightly appearance. It is not improbable that in those days, as in the present era, women of a certain, or rather an uncertain age, were more fervid in their endeavours to render themselves acceptable to Heaven when they ceased to be admired and sought for upon earth.

QUACKERY AND CHARLATANISM.

THE origin of the word “quack” is not ascertained. Johnson derives it from the verb “*to quack*, or gabble like a goose.” Butler uses this verb as descriptive of the encomiums empirics heap upon their nostrums. Thus in *Hudibras* :

Believe mechanic Virtuosi
Can raise them mountains in Potosi,
Seek out for plants with signatures
To *quack* of universal cures.

The word *charlatan* is equally enveloped in obscurity. Furetiere and Calepin say that it arises from the Italian word *Ceretano*, from *Cæretum*, a town near Spoleto, whence first sallied forth a band of impostors, marching under the banners of Hippocrates, and roving from town to town, selling drugs and giving medical advice. Ménage has it that *charlatan* springs from *Circulatanus*, from *Circulator*. Other etymologists trace it to the Italian *Ciarlare*, to chatter.

The Romans called their quacks *Agyrtæ*, or *Seplasiarii*, from *Sepladium*, the generic name of aromatic substances. *Sepladium* was the place where they vended their drugs. Thus Martial :

Quodque ab Adumæis vectum *seplasia* vendunt,
Et quidquid confert medicis lagæa cataplus.

Some of the stratagems resorted to by needy empirics to get into practice are very ingenious, and many a regular physician has been obliged to have recourse to similar artifices to procure employment. It is related of a Parisian physician, that, on his first arrival in the capital, he was in the habit of sending his servant in a carriage about day-break to rap at the doors of the principal mansions to enquire for his master, as he was sent for to repair instantly to such and such a prince, who was dying. The drowsy porter naturally replied, with much ill-humour, "that he knew nothing of his master."—"What! did he not pass the night in this house?" replied the footman, apparently astonished. "No," gruffly answered the Swiss; "there's nobody ill here."—"Then I must have mistaken the house. Is not this the hotel of the Duke of ——?"—"No. Go to the devil!" exclaimed the porter, closing the ponderous gates. From this house his valet then proceeded from street to street, alarming the whole neighbourhood with his loud rap. Of course nothing else was spoken of in the porter's lodge, the grocer's shop, and the servants' hall for nine days.

Another quack, upon his arrival in a town, announced himself by sending the bellman round, offering fifty guineas reward for a poodle belonging to Doctor ——, Physician to his Majesty and

the Royal Family, Professor of Medicine, and Surgeon General, who had put up at such and such an inn. Of course the physician of a king, who could give fifty guineas for a lost dog, could not but be a man of pre-eminence in his profession.

Many years ago, the jaw-breaking words *Tetrachymagogon* and *Fellino Guffino Cardimo Cardimac Frames*, were chalked all over London, as two miracle-working doctors. Men with such names must have some superior qualification, and numbers flocked to consult them. Another quack put up as an advertisement, that he had just arrived in town after having made the wonderful discovery of the green and red dragon and the female fern-seed. This was sure to attract notice. An advertisement was handed about of a learned physician, "who had studied thirty years by candle-light for the good of his countrymen. He was moreover the seventh son of a seventh son, and was possessed of a wonderful cure for hernia, as both his father and his grandfather had been ruptured." This reminds one of the oculist in Mouse Alley, mentioned in the Spectator, who undertook to cure cataracts, in consequence of his having lost an eye in the Imperial service. Dr. Case made a fortune by having the lines, *Within this place, lives Doctor Case*, written in large characters upon his door.

The accidental circumstances which frequently bring medical men into extensive practice, or that

notoriety which may lead to it, is truly curious. It is well known that a most eminent English physician owed all his success to his having been in a state of intoxication. Disappointed on his first arrival in London, he sought comfort in a neighbouring tavern, where the servant of his lodging went to fetch him one evening, after a heavy potation, to see a certain countess. The high-sounding title of this unexpected patient tended not a little to increase the excitement under which he laboured. He followed a livery footman as steadily as he could, and was ushered in silence into a noble mansion, where her ladyship's woman anxiously waited to conduct him most discreetly to her mistress's room ; her agitation most probably preventing her from perceiving the doctor's state. He was introduced into a splendid bed-chamber, and staggered towards the bed in which the lady lay. He went through the routine practice of pulse-feeling, &c. and proceeded to the table to write a prescription, which in all probability would have been mechanically correct. But here his powers failed him. In vain he strove to trace the salutary characters, until, wearied in his attempts, he cast down the pen, and exclaiming "Drunk, by G—!" he made his best way out of the house. Two days after he was not a little surprised by receiving a letter from the lady, enclosing a check for £100, and promising him the patronage of her family and friends, if he

would observe the strictest secrecy on the state he found her in. The fact simply was, that the countess had been indulging in brandy and laudanum, which her abigail had procured for her, and was herself in the very condition which the doctor had frankly applied to himself.

Chance, more than science or ability, has frequently brought professional men to the summit of their business. There is an Eastern story of a certain prince who had received from a fairy the faculty of not only assuming whatever appearance he thought proper, but of discerning the wandering spirits of the departed. He had long laboured under a painful chronic disease, that none of the court physicians, ordinary or extraordinary, could relieve; and he resolved to wander about the streets of his capital until he could find some one, regular or irregular, who could alleviate his sufferings. For this purpose he donned the garb and appearance of a dervish. As he was passing through one of the principal streets, he was surprised to see it so thronged with ghosts, that, had they been still inhabitants of their former earthly tenements, they must have obstructed the thoroughfare. But what was his amazement and dismay when he saw that they were all grouped with anxious looks round the door of his royal father's physician, haunting, no doubt, the man to whom they attributed their untimely doom. Shocked with the sight, he hurried to another

part of the city, where resided another physician of the court, holding the second rank in fashionable estimation. Alas! his gateway was also surrounded with reproachful departed patients. Thunderstruck at such a discovery, and returning thanks to the Prophet that he was still in being, despite the practice of these great men, he resolved to submit all the other renowned practitioners to a similar visit, and he was grieved to find that the scale of ghosts kept pace with the scale of their medical rank. Heartbroken, and despairing of a cure, he was slowly sauntering back to the palace, when, in an obscure street, and on the door of a humble dwelling, he read a doctor's name. One single poor solitary ghost, leaning his despondent cheek upon his fleshless hand, was seated on the doctor's steps. "Alas!" exclaimed the prince, "it is then too true that humble merit withers in the shade, while ostentatious ignorance inhabits golden mansions. This poor neglected doctor, who has but one unlucky case to lament, is then the only man in whom I can place confidence." He rapped; the door was opened by the doctor himself, a venerable old man, not rich enough perhaps to keep a domestic to answer his unfrequent calls. His white locks and flowing beard added to the confidence which his situation had inspired. The elated youth then related at full length all his complicated ailments, and the still more complicated treatment to which he had

in vain been submitted. The sapient physician was not illiberal enough to say that the prince's attendants had all been in error, since all mankind may err; but his sarcastic smile, the curl of his lips, and the dubious shake of his hoary head, most eloquently told the anxious patient that he considered his former physicians as an ignorant, murderous set of upstarts, only fit to depopulate a community. With a triumphant look he promised a cure, and gave his overjoyed client a much-valued prescription, which he carefully confided to his bosom; after which he expressed his gratitude by pouring upon the doctor's table a purse of golden sequins, which made the old man's blinking eyes shine as bright as the coin he beheld in wonderous delight. His joy gave suppleness to his rigid spine, and, after bowing the prince out in the most obsequious manner, he ventured to ask him one humble question: "By what good luck, by what kind planet, had he been recommended to seek his advice?" The prince naturally asked for the reason of so strange a question, to which the worthy doctor replied, with eyes brimful with tears of gratitude, "Oh, sir, because I considered myself the most unfortunate man in Bagdad until this happy moment; for I have been settled in this noble and wealthy city for these last fifteen years, and have only been able to obtain one single patient."—"Ah!" cried the prince in despair, "then it must be that poor, solitary, un-

happy-looking ghost that is now sitting on your steps."

It has been observed that religious sects have materially contributed to the elevation of physicians in society, and political associations have been equally beneficial. The celebrated Mead was the son of a non-conforming minister, who, knowing the influence he possessed over his numerous congregation, brought him up as a physician, in the full confidence of obtaining the splendid result that rewarded the speculation. His example was followed by several dissenting preachers; amongst whom we may name Oldfield, Clarke, Nesbitt, Lobb, Munckly, whose sons all rose to extensive and most lucrative practice. At that period St. Thomas's and Guy's Hospitals were under the government of Dissenters and Whigs; and so soon as any one became a physician to the establishment, his fortune was made. The same advantages attended St. Bartholomew's and Bethlehem, both of royal foundation, and under the influence of Tory government.

Dr. Meyer Schomberg, who was a poor Cologne Jew, came to London without any profession, when, not knowing what to do to obtain a living, to use his own words, he said, "I am a physician;" and having thus conferred a degree upon himself, he sedulously cultivated the acquaintance of all his fellow Jews about Duke's Place, got introduced to some of their leading and wealthy

mercantile brethren, and a few years after Dr. Schomberg was in the annual receipt of four thousand pounds. It is rather strange, but the Jew was succeeded in his lucrative practice by a Quaker. This was the celebrated Dr. Fothergill. Brought up an apothecary, he took out a Scotch degree, and, attaching himself to Schomberg, calculated on following his example; and, on his patron's decease, he slipped into the practice of both Jew and Gentile.

Amongst many singular instances of good fortune may be mentioned a surgeon of the name of Broughton, to whom our East India Company may consider themselves as most indebted, since he was the person who first pointed out the advantages that might result from trading in Bengal. Broughton happened to travel from Surat to Agra in the year 1636, when he had the good fortune to cure one of the daughters of the Emperor *Shah-Jehan*. To reward him, this prince allowed him a free trade throughout his dominions. Broughton immediately repaired to Bengal to purchase goods, which he sent round by sea to Surat. Scarcely had he returned, when he was requested to attend the favourite of a powerful nabob, and he fortunately restored her to health, when, in addition to a pension, his commercial privileges were still more widely extended; the prince promising him at the same time a favourable reception for British traders.

Broughton lost no time in communicating this intelligence to the Governor of Surat; and it was by his advice that the company sent out two large ships to Bengal in 1640.

There are some amusing anecdotes related regarding a vocation for the medical profession. Andrew Rudiger, a physician of Leipsic, when at college, made an anagram of his name, and, in the words *Andreas Rudiger* he found "*Arare Rus Dei Dignus*," or, "worthy to cultivate the field of God." He immediately fancied that his vocation was the church, and commenced his theological studies. Showing but little disposition for the clerical calling, the learned Thomasius recommended him to return to his original pursuits. Rudiger confessed that he had more inclination for the profession of medicine than the church; but that he had considered the anagram of his name as a divine injunction. "There you are in error," replied Thomasius; "that very anagram calls you to the art of healing, for *Rus Dei* clearly meaneth the church-yard."

ON THE USE OF TEA.

SUCH is the growing consumption of this now indispensable article in England, that in 1789 there were imported 14,534,601 lbs., and in 1833 the quantity was increased to 31,829,620 lbs.; the latter importation yielding a revenue of 3,444,101*l*. In other countries we find the consumption much less. Russia in 1832 imported 6,461,064 lbs.; Holland consumes about 2,800,000 lbs., and France only 230,000 lbs.

It is supposed that tea was first introduced in Europe by the Dutch, about the middle of the seventeenth century; and Lords Arlington and Ossory are said to be the first persons who made it known in England. In 1641, Tulpius, a Dutch physician, mentions it in his works. In 1667, Fouquet, a French physician, recommended it to the French faculty; and in 1678, we find an elaborate treatise written on it by Cornelius Boutkoë, physician to the Elector of Brandenburg. About the same time, several travellers and missionaries, amongst whom we find Kœmpfer, Kalm, Osbeck, Duhalde, and Lecomte, give various accounts of the plant and its divers qualities.

The Chinese name of this plant is *theh*, a Fokien word. In the Mandarin it is *tcha*, and the Japanese call it *tsjaa*. *Loureiro*, in his *Flora Cochinchina*, describes three species of tea. It is a polyandrous plant of the natural order *Columniferæ*, growing to the height of from three to six feet, and bearing a great resemblance to our myrtle. The blossom is white, with yellow style and anthers, not unlike that of the dog-rose; the leaves are the only valuable part of the plant. The *camellias*, particularly the *camellia sesanqua*, of the same natural family, are the only plants liable to be confounded with it. The leaves of the latter camellia are indeed frequently used as a substitute for those of the tea-plant in several districts of China. This shrub is a hardy evergreen, growing in the open air from the equator to the forty-fifth degree of northern latitude; but the climate that appears the most congenial to it seems to be between the twenty-fifth and thirty-third degree. Almost every province and district in China produces tea for local consumption: but what is cultivated for trade is chiefly in Fokien, Canton, Kiang-nan, Kiang-si, and Che-Kiang; Fokien being celebrated for its black tea, and Kiang-nan for the green. The plant is also cultivated in Japan, Tonquin, and Cochinchina, and in some parts of the mountainous tracts of Ava, where, in addition to its use in infusion, it is converted into a pickle preserved in oil.

When tea was first introduced as a luxury on high days and holidays in the wild districts of Ireland, the people used to throw away the water it had been boiled in, and eat the leaves with salt-butter or bacon like greens. The Dutch are now endeavouring to propagate this valuable plant in Java, and for that purpose employ cultivators, who have emigrated from Fokien. The Brazilians are making similar attempts, and some tolerable tea has been reared near Rio Janeiro.

The black teas usually imported from Canton are the *bohea*, *congou*, *souchong*, and *pekie*, according to our orthography: the French missionaries spelt them as follows,—*boui*, *camphou* or *campoui*, *saotchaon*, and *pekao* or *peko*. Our green teas are the *twankay*, *hyson-skin*, and *hyson*, *imperial*, and *gunpowder*; the first of which French travellers write *tonkay*, *hayswin-skine*, and *hayswin*. The French import a tea called *téhulan*, but it is artificially flavoured with a leaf called *lan hoa*, or the *olea fragrans* of Linnæus.

The tea plant grows to perfection in two or three years: the leaves are carefully picked by the family of the growers, and immediately carried to market, where they are purchased for drying in sheds. The tea merchants from Canton repair to the several districts where it is produced, and, after purchasing the leaves thus, simply desiccated, submit them to various mani-

pulations; after which they are packed in branded cases and parcels called *chops*, from a Chinese word meaning a seal. Some of the leaf-buds of the finest black tea plants are picked early in the spring, before they expand : these constitute *pekoe*, sometimes called “ white-blossomed tea,” from their being intermixed with the blossoms of the *olea fragrans*. The younger the leaf, the more high-flavoured and valuable is the tea. Green teas are grown and gathered in the same manner ; but amongst these the gunpowder stands in the grade of the *pekoe* among the black, being prepared with the unopened buds of the spring crops. The alleged preparation of green teas upon copper plates, to give them a verdant colour, is an idle story. They are dried in iron vases over a gentle fire ; and the operator conducts this delicate work with his naked hand, and the utmost care not to break the fragile leaves. This part of the manipulation is considered the most difficult, as the leaves are rolled into their usual shape between the palms of the hands until they are cold, to prevent them from unrolling. Teas are adulterated by various odoriferous plants, more especially the *vitex pinnata*, the *chloranthus inconspicuus*, and the *illicium anisatum*. In our markets the chief adulteration is operated by the mixture of sloe and ash leaves, and colouring with terra Japonica and other drugs.

That tea is a substance injurious to health is

beyond a doubt. Nothing but long habit from early life renders it less baneful than it otherwise would be: persons who take its infusion for the first time invariably experience uncomfortable sensations. It is well known that individuals who are not in the practice of taking tea in the evening, never transgress this habit with impunity; and it is quite clear that a preparation which deprives them of sleep, and renders them restless during a whole night, cannot be salubrious by day; and although the following opinion of Dr. Trotter regarding the use of this leaf is somewhat exaggerated, it is founded on experience; and I have known several persons afflicted with a variety of serious affections who never could obtain relief until they had ceased to consume it.

“Tea is a beverage well suited to the taste of an indolent and voluptuous age. To the glutton it affords a grateful diluent after a voracious dinner; and, from being drunk warm, it gives a soothing stimulus to the stomach of the drunkard: but, however agreeable may be its immediate flavour, the ultimate effects are debility and nervous diseases. There may be conditions of health, indeed, where tea can do no harm, such as in the strong and athletic; but it is particularly hurtful to the female constitution, to all persons who possess the hereditary predisposition to dyspepsia, and all diseases with which it is as-

sociated, to gout, and to those who are naturally weak-nerved. Fine tea, where the narcotic quality seems to be concentrated, when taken in a strong infusion, by persons not accustomed to it, excites nausea and vomiting, tremors, cold sweats, vertigo, dimness of sight, and confusion of thought. I have known a number of men and women subject to nervous complaints, who could not use tea in any form without feeling a sudden increase of all their unpleasant symptoms ; particularly acidity of the stomach, vertigo, and dimness of the eyes. As the use of this article of diet extends among the lower orders of the community and the labouring poor, it must do the more harm. A man or a woman who has to go through much toil and hardship has need of substantial nourishment ; but that is not to be obtained from an infusion of tea. And if the humble returns of their industry are expended in this leaf, what remains for the purchase of food better adapted to labour ? In this case tea becomes hurtful, not only from its narcotic quality, but because that quality acts with double force in a body weakened from other causes. This certainly is one great reason for the increased and increasing proportion of nervous, bilious, spasmodic, and stomach complaints, &c. appearing among the lower ranks of life."

It is well known that tea is frequently resorted to by literary men to keep them awake during

their lucubrations. Dr. Cullen said he never could take it without feeling gouty symptoms; and we frequently see aged females, who are in the habit of taking strong green tea, subject to paralytic affections. Many experienced physicians, such as Grimm, Crugerus, Wytt, Murray, Letsom, condemn the abuse of the plant as highly dangerous.* That it is a most powerful astringent we well know; and the hands of the Chinese who are employed in its preparation are shrivelled, and, to all appearance, burned with caustic. Chemists have extracted from it an astringent liquor containing tannin and gallic acid. This liquor, injected in the veins or under the integuments of frogs, produces palsy of the posterior extremities, and, applied to the sciatic nerve for half an hour, has occasioned death.

There is no doubt that tea acts differently on various individuals. In some it is highly stimulant and exhilarating; in others its effects are oppression, lowness of spirits; and I have known a person who could never indulge in this beverage without experiencing a disposition to commit suicide, and nothing could arouse him from this state of morbid excitement but the pleasure of destroying something, books, papers, or any thing within his reach. Under no other circumstances than this influence of tea were these fearful aberrations observed. It has been remarked that

* Patin called it *l'impertinente nouveauté du siècle*.

all tea-drinking nations are essentially of a leucophlegmatic temperament, predisposed to scrofulous and nervous diseases. The Chinese, even the degraded Tartar races amongst them, are weak and infirm, their women subject to various diseases arising from debility. Although their confined mode of living, and want of the means of enjoying pure air and exercise, materially tend to render them liable to these affections; still their immoderate use of strong green tea, taken, it is true, in very small quantities at the time, but repeatedly, greatly adds to this predisposition.

From long experience I am convinced that, although tea may in general be considered a refreshing and harmless beverage, yet in some peculiar cases it is decidedly injurious; and many diseases that have baffled all medical exertions, have yielded to the same curative means so soon as the action of tea had been suspended.

INNATE APPETITES.

SIR GEORGE M'KENZIE, in his Phrenological Essays, mentions the following curious fact, witnessed by Sir James Hall. He had been engaged in making some experiments on hatching eggs by artificial heat, and on one occasion observed in one of his boxes a chicken in the act of breaking from its confinement. It happened that, just as the creature was getting out of his shell, a spider began to run along the box, when the chicken darted forward, seized, and swallowed it.

END OF THE FIRST VOLUME.

LONDON :
PRINTED BY SAMUEL BENTLEY,
Dorset Street, Fleet Street.







Date Due

Demco 293-5			

5
7
6
3

R706
837M
1

